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TOPICAL OUTLINES OF GEOGRAPHY

FAIRBANKS

DEVELOPED ACCORDING TO THE PROBLEM METHOD

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NORTH AMERICA

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PART I

NORTH AMERICA

TOPICAL OUTLINES OF GEOGRAPHY

PART I—NORTH AMERICA.

PART II—SOUTH AMERICA.

PART III—EUROPE.

PART IV—ASIA.

PART V—AFRICA, AUSTRÁLIA AND ISLANDS OF THE PACIFIC.

TOPICAL OUTLINE

OF

GEOGRAPHY

PART I
NORTH AMERICA

Developed According to the Problem Method

BY

H. W. FAIRBANKS, PH. D.

Author of "Stories of Our Mother Earth," Rocks and Minerals, Home Geography, Practical Physiography, Conservation Reader, Western United States, Geography of California, etc.

PHILADELPHIA
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PREFACE

This small geography is one of a series in which the natural regions of the different continents are topically and progressively studied from the "problem" point of view. The aim is to guide the pupil to true geographical concepts—to a clear understanding of the relation existing between the people and their environment, rather than to a mere memorizing of tiresome details, which, in these texts, but serve as temporary stepping-stones to a broad and abiding knowledge of the subject.

The boundaries of the different regions are depicted by a simple physical map. Where, however, more detail is desired the pupil is referred to an atlas or to the maps in the larger books.

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PART I

NORTH AMERICA

NORTH AMERICA—A PART OF THE NEW WORLD MADE KNOWN BY COLUMBUS

SECTION I

THE NATURAL REGIONS OF NORTH AMERICA AND THEIR INFLUENCE UPON ITS DISCOVERY AND SETTLEMENT

INTRODUCTION

I. Why we study North America before the other continents.

Why do we call the land discovered by Columbus "The New World?"

How did The New World come to be known as America?

Was Columbus the real discoverer of America?

1. It is believed North America was visited by the Norsemen.

2. Long before the time of the Norsemen other peoples had found America.

What led Columbus to make the voyage into the unknown Atlantic which resulted in the discovery of The New World?

What was first thought about the extent of the New Land?

How is it that so long a time passed after the discovery by Columbus before the real size and position of North America became known?

1. The explorers all came from the eastward.

2. An ice barrier blocked the way around America on the north.

3. It was a long dangerous journey around South America.

4. Men feared the pathless interior.

What led many other explorers to follow Columbus?

1. A desire to find a water route to the Indies.

2. Each of the nations of Europe desired an interest in the new lands.

3. Adventurers hoped to find gold and silver.

4. Missionaries planned to convert the natives to Christianity.

5. The greatest number sought to make homes where they would be free from oppression.

How did the nations of Europe divide up The New World?

1. The English took possession of the Middle Atlantic Coast.

2. The Spanish discovered and settled the lands bordering the Gulf of Mexico.

3. The French settled the basin of the St. Lawrence River.

What were the chief difficulties in making homes in the new land?

1. The voyage across the Atlantic was long and dangerous.

2. The new shores were found to be densely forested.

3. The winters in the north were long and severe.

4. The southern coasts were hot and unhealthful in summer.

5. The natives objected to giving up their lands.

What sort of natives were found occupying The New World?

1. The larger number were fierce and warlike.

2. What can we say of the natives of the far North.

3. In the Southwest were found partly civilized Indians living in permanent stone houses.

How did the nature of the country make it difficult for the English settlements to spread into the interior?

What advantage did the French have in the location of their settlements?

What advantages and disadvantages were possessed by the lands occupied by the Spanish?

How is it that the Spanish reached the Pacific Coast and settled parts of it ahead of any other people?

What made exploration of the Pacific Coast more difficult than that of most of the Atlantic Coast?

What can we learn from the relief map about the surface of North America?

1. A great highland occupies the western half.

2. A lesser highland borders the eastern coast.

3. A lowland extends north and south through the heart of the continent.

What does the map tell us as to the nature of the coasts and the adjoining ocean bottom?

1. The northern half of the continent is much better supplied with bays than is the southern half.

2. The coast waters are shallow in most places for some distance out to sea.

What disadvantages did the arrangement of the highlands, lowlands and the great bays present?

1. The Appalachian Highlands lay in the way of entrance to the interior.

2. The St. Lawrence river offered the easiest route to the interior.

3. The mouth of the Mississippi River lay far away to the southward.

4. The Western Highlands blocked the way from the Pacific Ocean.

5. Hudson Bay is closed by ice most of the year.

How is it that the Appalachian Highlands held back the settlers for so long a time although they are much lower than the Western Highlands?

What particular water route comes the nearest to being continuous between the Gulf of Mexico and Hudson Bay?

By what waters can one travel across the continent from the Gulf of St. Lawrence to the Gulf of Mexico?

Why were the difficulties of the pioneers in the Western Highlands so great?

In what lay the great advantage of the many navigable rivers and lakes of the eastern half of the continent?

Which are naturally best suited to navigation, the streams of the Mississippi basin or those of the St. Lawrence basin?

How have the rivers been improved so as to make them useful to large boats?

How can we account for there being many lakes in the northern part of the continent and none in the south?

How is it that although the northern part contains so many lakes and rivers the most of it still remains unsettled?

How is it that the region about the Gulf of Mexico long remained thinly settled?

How can we account for the fact that English settlers moved westward from the Atlantic Coast instead of attempting to spread north or south?

How did the appearance of the forest change as the pioneers moved westward?

What great advantage did the prairies offer for settlement as compared with the other parts of the continent?

Why is it that in spite of the advantages of the Mississippi valley it was many years before settlers could gain more than a mere living?

1. It was easy to grow all kinds of farm produce on the prairies.

2. The rivers of the prairies flowed in the wrong direction.

3. The outlet through the St. Lawrence river was impracticable.

Why is it that the great plains, though lying directly west of the prairies were shunned by the early settlers?

What first led explorers across the plains and into the Rocky Mountains?

How much use did the early explorers make of the streams of the Great Plains?

Did the explorers find the region beyond the Rocky Mountains as forbidding as the Great Plains?

Why did the Spaniards make their chief settlements in the interior highlands of Mexico rather than on the coast?

1. The coasts were found to be unhealthy.

2. The chief quest of the Spaniards was gold and silver.

Why did the Spaniards make little attempt to explore the interior of California?

How do the streams of the Pacific coast compare with those of the Atlantic as regards their value for navigation?

What important uses have western rivers that partly compensates us for their lack of value as highways?

Why is it that the less value streams possess for navigation the more they usually possess for manufacturing purposes?

In what respects did the Western Highlands form a far more serious barrier than the Eastern?

1. The distance across the Western Highlands is several times greater than across the Eastern.

2. The Western Highlands are far more rugged and lofty.

3. Much of the plateau between the eastern and western ranges is a desert where water and feed are scarce.

4. The streams flowing westward across the highland flow in deep canons.

5. There are no gaps in the Western Highlands like the Mohawk Valley in the Eastern Highlands.

What advantages and disadvantages for farming are possessed by the Western Highlands as compared with the Eastern?

1. The Western Highlands are plateau-like in character and support many lofty mountain ranges.

2. The most of the streams of the Western Highlands flow in canons while the streams of the Eastern Highlands flow in valleys.

3. The Western Highlands possess great stretches of almost level land. The Eastern Highlands are rolling and hilly.

4. Most parts of the Western Highlands lack rain while the Eastern are well watered.

5. The Western plateaus are free from forests except in the north. The Eastern Highlands were once forested.

6. Until the building of the railroads the Western Highlands were far from market. The Eastern Highlands are convenient to market by rail, river, lake or canal.

What attractions for the pioneers existed in the Cordilleran or Western Highlands that were lacking in the Appalachians?

Why was it that the people of the east believed for a long time that the mountainous region west of the Great Plains was not worth claiming?

What is now our opinion of the Cordilleran Highlands as a farming region?

What led to the earlier exploration of the southern and drier part of the Cordilleras?

What industry first led men into the far Northwest?

What has recently called great numbers of men into the far Northwest?

To what extent can the miners of the Yukon region raise their own food supplies?

What are the resources of the Cordilleran Highlands as a whole?

How do the resources of the North Pacific Coast compare with those of the North Atlantic?

How do the harbors of the Western Coast compare with those of the Eastern?

SECTION II

THE CLIMATE OF NORTH AMERICA AND ITS INFLUENCE UPON THE DISCOVERY AND SETTLEMENT

What do we mean by the climate of a place?

Review of what has been learned earlier about the climate of the earth.

1. Why the turning of the earth on its axis makes day and night.
2. Why the journey of the earth around the sun gives the seasons.
3. Why if we travel north or south the sun changes its position in the sky.
4. Why if we travel east and west the sun appears to have the same height in the sky.
5. Why belts of sunshine run around the earth in an east and west direction.
6. Why belts of heat and cold run around the earth in an easterly and westerly direction but are very crooked.
7. That the belts of heat and cold are irregular because:
   a. The highlands are cold even in the hot belt.
   b. The sea winds give the lands onto which they blow an even climate.
   c. In summer lands far from the ocean become very hot.
   d. In winter lands far from the ocean or without ocean winds are cold.
8. That the rain clouds come from the ocean.
   a. A rainstorm is like a great dust whirl.
   b. The cloud particles if whirled into the high cold air fall as rain or snow.

c. Moist ocean winds do not bring rain unless they are a part of a whirl or strike against cooler mountain slopes.

d. The rain ceases and clouds disappear upon reaching a warmer region or after passing high mountains.

How is it that the settlers found so many different climates in North America?

1. The climate varies from the very cold to the very hot because:
   a. The continent extends so far from north to south.
   b. The continent is so wide from east to west that the mild ocean winds do not reach the interior.
   c. There are many plateaus and lofty mountain ranges.
2. The climate varies from the very wet to the very dry because:
   a. Lands bordering the coasts receive abundant rains if the storm winds blow from the water.
   b. Interior lands receive little rain where there are high mountains between them and the ocean from which the winds blow.
   c. Mountains receive more rain than the lowlands about them.

How has the distribution of heat and cold affected the settlement of North America?

1. The people who came to the New Land sought a climate similar to that to which they were accustomed.

2. The French, English and Dutch settled upon the eastern coast.

3. In the highlands of Mexico the Spaniards found a climate similar to Spain.

4. The northern part was found to be too cold.

5. The tropical lowlands proved to be unhealthful.

In how far did the rainfall affect the settlement of North America?

1. The heavy rain of the eastern part produced forests that had to be cleared.

2. The lesser rainfall of the Mississippi Valley gave rise to the prairies, the paradise of the farmer.

3. The desert plains and plateau were avoided.

Had the ocean currents any influence upon the settlement of North America?

1. The Labrador Current.

2. The Gulf Stream.

3. The currents along the Pacific Coast.

How is it that Columbus sailing southwesterly from Spain had an easier voyage than he would have had by sailing directly west?

1. There are regular wind belts or currents just as there are ocean currents.

2. Columbus sailing southwesterly had a favorable wind.

3. If Columbus had sailed westerly he would often have had head winds.

4. Between the two belts is a third belt of little wind.

What does one mean when he says his home is in the North Temperate Belt?

If one said his home was in the North Temperate Zone would he mean the same as North Temperate Belt?

Which expression "temperate belt" or "temperate zone" tells the most about one's home?

How was it that, in order to find a climate in The New World as mild as that of their European home, the English settlers had to go farther south?

What great advantages for the development of North America are offered in the extent of the temperate belt?

1. The cold temperate belt.

2. The warm temperate belt.

3. The temperate belt between the other two.

Can we do anything to make the far north more habitable?

In how far can we overcome the unfavorable climate of the tropical lowlands?

How is it that the southwest coast of North America receives so little rain?

1. In the tropical portion mountains partly cut off the northeast trade winds.

2. North of the trade wind belt is the belt of calms or Horse Latitudes.

Why are the rains distributed so unequally over the western part of North America?

1. Mountain ranges lie across the path of the winds.

2. Mountain slopes receive more rain than the lowlands around them.

3. The rains are due to great air whirls or cyclones.

4. The storm whirls are more frequent toward the north.

What is the usual course of cyclonic storms across North America?

How can we explain the puzzling fact that while these storms bring little rain to the eastern slope of the Rocky Mountains the rains become very heavy as they approach the Atlantic Coast?

How can we account for the clear cold weather following these storms?

What is the story of the hurricanes that sometimes cause much destruction along the Gulf Coast?

Why are the tornados of the Mississippi Valley so greatly feared?

SECTION III

LIFE CONDITIONS IN NORTH AMERICA:—A SUMMARY

What conditions determined the rapidity of settlement of different regions of North America?

1. Nearness to Europe.
2. A climate with abundant rains during the summer.
3. A fertile soil with slopes not too steep for cultivation.
4. Towns grew up where there were good harbors.
5. Navigable water ways determined the position of the early settlements of the interior.
6. Advantages for manufacturing.
7. Deposits of minerals.

What has the building of roads, railroads and canals done for North America?

How were the occupations of the early settlers of North America affected by the difficulty of getting supplies from Europe?

1. Hunting became an important occupation.
2. Fishing became an important industry.
3. Clothing and household articles were made in the home.
4. The clearing of the forest was necessary before anything could be planted.

What other occupations early became important?

1. An abundance of suitable timber and the need for boats led to ship-building.
2. The growing commerce called for many sailors.
3. The abundance of water power led to the building of mills.

4. In the far south the chief industry continued to be mining.

5. In the far north hunting and trading were the only industries.

6. Ranching in the west was different from farming in the east.

What has determined the distribution of the leading industries?

1. Farming became the leading industry where there were large areas of rich soil and a favorable climate.

2. Stock raising became the chief industry where there was sufficient rain to grow grasses but not enough for farming.

3. Fishing became important where the coast line was broken and there were large shallow areas or "banks."

4. Hunting and trapping were carried on where the cold winters made furs of good quality.

5. The getting of oil and coal from the earth became important in parts of the Appalachians, the Great Central valley and the Western Highlands.

6. Mining of gold, copper, silver, lead and zinc became a great industry chiefly in the Western Highlands.

7. Lumbering engaged many people in forested parts of continent where there was a market.

8. Manufacturing became important where water power and raw materials were to be had.

9. Commerce developed where there were good harbors and waterways leading into the continent.

What are the causes which made parts of the continent develop slowly?

1. The inaccessibility of many mountain districts.

2. The coast lowlands of the hot belt were shunned.

3. Life in the far north was not attractive.

4. People could not live in the deserts until water could be had.

What are four important things that guide people in their choice of homes?

1. The farmer considers the nature of the soil, the climate and accessibility to market.

2. The prospector turns his steps toward the mountains.

3. The lumberman must go where there is abundant rain and climate not too cold.

4. Many occupations do not require any particular climate or location.

Why has the population become very dense in some parts of North America?

1. Large factories necessitate many people living near together.

2. Great cities grow up at points favorable to trade.

3. Rich soil, favorable climate and nearness to market produce a dense farming population.

What parts of the continent, still thinly settled, will some day support many people?

Has the waste of natural resources had any effect upon industries?

What bad effect has the clearing of the land had upon the country?

1. Floods have become worse than they were once.

2. The soil of the cleared hillsides is easily washed away.

What can we do to lessen the loss from rain and flood?

1. Allow the steeper higher slopes to remain forested.

2. Use care in plowing and cultivating hill lands.

3. Build reservoirs in the mountains to hold the flood waters.

SECTION IV

THE NATURAL REGIONS OF NORTH AMERICA

What do we mean by natural regions in our study of geography?

What do we mean by political divisions?

Why is it best for us to study the natural divisions of North America before taking up its political divisions?

In what order shall we take up the different natural regions?

THE ATLANTIC COASTAL PLAIN

THAT FERTILE LOWLAND REGION LYING BETWEEN THE APPALACHIAN HIGHLANDS AND THE ATLANTIC OCEAN WHERE FARMING EARLY BECAME AN IMPORTANT INDUSTRY.

What do we mean by the Atlantic Coastal Plain?

What does the position and extent of the plain tell us as to its probable importance?

What advantages did this region offer to settlement?

1. The many bays and rivers made it very accessible.
2. The land is almost level, well watered, and the soil is usually rich.
3. The climate is milder than that of New England.

What difficulties were encountered in settling this plain?

1. The plain was covered with forests.
2. Vast swamps lay back of the coast especially toward the south.

3. The Indians caused much trouble.

How can we account for the presence of this fertile coastal plain?

What three natural divisions do we discover in the coastal plain?

1. A lower part now submerged beneath the ocean.

2. A middle part lying next the shore and having a low swampy surface.

3. An upper part extending back to the hills.

Why is this coastal plain often spoken of as "the tide-water country?"

How can we explain the fact that the bays become shallower and smaller toward the south?

What remarkable features do we find shown by the rivers where they enter the coastal plain from the hill land behind?

What has the "Fall Line" had to do with the settlement of this region?

1. The Fall Line determined the position of a line of Indian villages.

2. The Fall Line later became the seat of white settlements.

What has been the story of the swampy lands along the coast?

Why did the peninsula of Florida settle more slowly than the northern part of the coastal plain?

What advantages and disadvantages does the flat coast offer for navigation?

1. The gentle slope of the coastal plain extends out under the water.

2. Prominent points of land, such as Cape Hatteras, are dangerous in stormy weather.

3. The waves have thrown up barrier beaches in front of the low shores.

4. The water in most of the lagoons is shallow.

5. The lagoons favor local coasting trade but there are few large harbors that large vessels can enter.

What can we say of the relative importance of the bays upon the Atlantic Coastal Plain?

1. The Delaware and Chesapeake Bays extend far into the land.

2. Albemarle and Palmetto Sounds are shallow.

3. The southern part of the coastal plain has no large bays or estuaries.

How does the coast compare in a general way with that of New England?

How is it that the fishing industry is of less importance than that of New England?

What has led Chesapeake Bay to become the centre of the oyster industry?

How can we explain the abundant rains of the coastal plain since the storms and prevailing winds come from the west?

What variations in climate should we expect the coastal plain to present?

Why are the summers hotter and the winters colder than in the same latitude upon the Pacific Coast?

Why is it that the tropical fruits of the southern end of the Florida Peninsula never suffer from cold while the sub-tropical fruits of the northern end are sometimes frozen?

Judging from the climate and surface of the coastal plain what should we expect its resources to be?

1. The coastal plain was originally covered with forest.

2. The plain possesses many kinds of soil.

3. The minerals of the plain are few.

Why has the coastal plain become more noted for its turpentine than for its lumber?

How did it happen that tobacco was one of the first products to be grown upon a commercial scale?

How is it that rice has become an important product of the coastal plain?

In how far is the coastal plain suited to the growing of cotton?

1. Cotton must have a hot climate.

2. Cotton requires well drained land but must have plenty of water.

How is it that the growing of small fruits and vegetables has become so important in recent years?

1. The climate is milder than that of the interior.

2. Navigable waters offer cheap transportation to market.

3. The great cities along the Fall Line offer a good market.

What particular advantages for market gardening are offered by the southern part of the coastal plain?

What other important products are grown upon the coastal plain?

1. The extreme southern end of the Florida Peninsula is adapted to tropical fruits, such as bananas, pineapples, etc.

2. The northern part of the Florida Peninsula produces large quantities of sub-tropical fruits.

3. Large quantities of corn and peanuts are grown farther north.

What effect did the establishment of large plantations have upon the development of this region?

1. The land remained comparatively thinly settled with white people.

2. Negro slaves were imported to do the plantation work.

In what consists the great advantage of the small farms of the present day?

Why do we find the population most dense upon the higher parts of the plain?

1. The lower part is marshy and less healthful.
2. Tho separts with a poor sandy soil are thinly inhabited.
3. The higher and slightly hilly portion offers the best climate and sites for homes.

Why do we find most of the cities either at the coast or on the Fall Line?

In what lies the great attractiveness of the peninsula of Florida as a winter resort?

What are the relative advantages of Florida and California as winter resorts?

SPECIAL PROBLEMS OF THE ATLANTIC COASTAL PLAIN

Why was it that the settlers of the rich coastal plain were not satisfied with their opportunities but pushed westward into the wilderness beyond the Appalachian Highlands?

Why did most of the settlements grow up upon rivers at some distance from the ocean rather than upon the coast?

Why did the coastal plain settle more slowly than New England although it had better farm lands?

Why was the capitol city of the United States established at the Fall Line rather than in the centre of the continent?

Why is it that the Florida Peninsula, possessing the best commercial advantages of any part of the Coastal Plain, settled the slowest?

A rocky coast is ordinarily considered the most dangerous for ships. Why are parts of the coast, although without any rocky shores whatever, so dangerous to shipping in case of storms?

How is it that most of the lands of the Coastal Plain remained so long in large plantations although they could have supported many more white people if they had been divided into small farms?

Why is it that the climate is milder and more suited to early vegetables near the coast while the prevailing winds are westerly—from off the land?

What advantages and disadvantages have the growers of oranges and early vegetables compared with California growers?

Why have so few European emigrants settled upon the Coastal Plain in recent years although there is a great deal of unimproved land?

THE GULF COASTAL PLAIN

THE LAND OF SUGAR CANE AND COTTON:—OF TROPICAL AND SUB-TROPICAL FRUITS: OF LOW MARSHY COASTS AND DENSE FORESTS THROUGH WHICH DE SOTO STRUGGLED IN HIS JOURNEY OF DISCOVERY.

What is the position and extent of the Gulf Coastal Plain?

What does the heading suggest as to the climate of this region?

In how far does the plain resemble the Atlantic Plain?

1. The coast waters are shallow and the neighboring lands low and marshy.

2. Barrier beaches and islands border much of the mainland, inclosing estuaries and lagoons.

In what way does the Gulf Coast Plain differ from the Atlantic Plain?

1. There are no large bays such as the Chesapeake and Delaware.

2. The Mississippi River does not empty into an estuary or bay but has built a great delta.

What two important parts can we distinguish in the Gulf Plain?

1. The true coastal plain formed in same manner as the Atlantic Plain.

2. The flood plain and delta of the Mississippi river.

If people had come here thousands of years ago where would they have found the mouth of the Mississippi River?

Why is it that the outer part of the delta offers great difficulties to cultivation?

How can we account for the salt water lakes upon the border of the delta?

How did it come about that Spaniards gave us our first knowledge of this region?

How is it that the French made the first settlement?

By what route did the French reach this region?

Why is it that the Gulf Plain settled more slowly than most of the Atlantic Plain?

1. The region was more remote.

2. The climate is hot and moist.

3. The coasts and river banks are low, marshy and covered with a dense growth.

To what particular dangers are the settlers upon the low coasts and islands subject?

What dangers beset the farmers upon the Mississippi Flood Plain?

What means are now being employed to protect the rich bottom lands from floods?

What causes finally led to the settlement of the Mississippi Delta and Coastal Plain?

1. An increasing demand for the products of this rich farming region.

2. The timber resources.

3. Deposits of salt, sulphur and petroleum.

4. A knowledge of how to live comfortably in a hot moist climate.

Why is it that oranges are not raised extensively here as upon the peninsula of Florida?

What can we say of the bird and animal life of the gulf lowlands?

What changes do we see in the appearance of the coastal plain as we go westward from the delta region?

1. The rainfall decreases and with this a gradual change to the "prairies."

2. The occupations of the prairies are different from those of the forested lowlands.

How do we find the different agricultural products distributed over the coastal plain?

1. Rice is raised upon those lowlands that can be flooded easily.

2. Sugar cane is chiefly confined to the moist rich delta lands of the Mississippi.

3. Cotton is grown chiefly upon the higher drier parts of the coastal plain.

How can we explain the presence of negros in such numbers that a portion of this region is known as "The Black Belt?"

What influences determined the location and growth of most of the cities?

1. Opportunity for river trade.

2. Opportunity for ocean traffic.

Why is New Orleans sometimes called "The Crescent City?"

How has it become possible for the great modern steamers to reach the city from the ocean?

1. The channel of the Mississippi river across the delta has been deepened by building jetties.

2. A canal has been dug connecting the city with Lake Pontchartrain.

Why is it that New Orleans, though an important city, has not the foreign trade that its position at the mouth of the Mississippi should bring it?

What are the reasons for the importance of Galveston, situated upon a sandy island?

What disadvantages are possessed by both Galveston and New Orleans?

What should we expect would be the chief industries of the cities of the gulf lowlands?

What effect is the opening of the Panama Canal likely to have upon these cities?

SPECIAL PROBLEMS OF THE GULF COAST PLAIN

Why is it that the gulf lowlands, though possessing rich soil and easily accessible by ocean and river settled up so much more slowly than the prairies of the Upper Mississippi Valley?

How is it that the city of New Orleans though having better communication with the interior than New York is, however, a much less important city?

What is the reason the Mississippi River has built so great a delta, while the St. Lawrence river has built no delta at all?

Why is it that sugar cane is not grown on a large scale all along the gulf lowlands instead of chiefly on the Mississippi delta?

What is there about the situation of Galveston that should make it grow into a great city?

Why is it that most of the cotton is shipped away to be

manufactured into various articles, while there is a suitable climate and cheap labor at home?

How can we explain the fact that so much valuable timber still remains in the Gulf Region while farther north the forests have been largely cut away?

THE EASTERN OR APPALACHIAN HIGHLANDS

THAT HILLY AND MOUNTAINOUS REGION OCCUPYING THE EASTERN PART OF THE CONTINENT:—A REGION THAT FOR A LONG TIME BLOCKED THE WESTWARD MIGRATION OF THE PEOPLE SEEKING TO EXPLORE AND MAKE HOMES IN THE GREAT INTERIOR LOWLANDS.

A. THE PIEDMONT REGION

I. THE NORTHERN DIVISON OR NEW ENGLAND HILLS:—THAT ROCK-BOUND LAND OF THE PILGRIM FATHERS WHICH, ALTHOUGH MUCH OF ITS SURFACE IS UNFAVORABLE TO FARMING AND THOUGH IT CONTAINS FEW MINERALS OF VALUE, HAS, BECAUSE OF ITS MANY BAYS, ABUNDANT OCEAN LIFE, FORESTS AND UNLIMITED WATER POWER, BECOME ONE OF THE MOST THICKLY SETTLED AND IMPORTANT INDUSTRIAL REGIONS OF NORTH AMERICA.

Into what two very unlike parts has nature divided the Appalachian Highlands?

1. The part north of the Hudson-Mohawk Valleys; a region of hills and valleys irregularly distributed and above which rise mountain peaks.

2. The part south of the Hudson-Mohawk Valleys; a region which as a whole consists of rolling hills and valleys backed by parallel mountain ridges.

What waters make it possible to go almost around the New England Region in a small boat?

How is it that New England has more and better harbors than the Atlantic Coastal Plain?

How is it that the climate is so different in different parts of New England?

What are the particular dangers of navigation along the New England Coast?

1. The shores are rocky and irregular.
2. Fogs are frequent.
3. Tidal currents are strong.

Judging from the surface, climate and coast what should one expect of the industries of New England?

1. The rugged coast with many deep bays should encourage a sea-faring life.
2. Extensive shoals should make fishing an important business.
3. The pine forests and need for ships should lead to ship-building.
4. The many rapid streams encourage manufacturing.
5. The soil, often poor and rocky, is not encouraging to farming.
6. The cold and rocky northern part has discouraged settlement.
7. Mining has not become important because of lack of minerals.

What influence did the rivers have upon the location of settlements and the growth of industries?

1. Settlements grew up at the head of navigation on the estuaries.

2. The valley lands were more easily turned into profitable farms than were the rocky hill lands.

3. Mills were built at points on the streams where there was water power.

What difficulties did the settlers encounter when they tried to push inland?

1. The streams above the reach of the tide were swift and shallow.

2. Forests covered all the country.

3. Hostile Indians often attacked them.

4. The soil of the uplands was often very rocky.

Have the forests on the whole been an advantage or disadvantage?

1. The forests formed the most serious obstacle to farming.

2. The forest trees supplied lumber, fuel and food.

What parts of New England offered opportunities for farming as good as those of the Coastal Plain?

1. The strips of lowland along the coast.

2. Innumerable valleys among the hills and mountains.

3. The Connecticut River Valley.

To what extent are the hills and mountains adapted to farming?

What is the reason that the hill lands of New England have a poor and rocky soil?

1. The whole region was once covered by a glacier.

2. The moving ice carried away the soil.

3. The ground up rock left by the glaciers when it melted made poor soil and the boulders interfered with cultivation.

In what way has the glacier greatly affected the development of New England?

1. The glacier turned the streams into new channels with rapids and waterfalls.

2. The glacier left many lakes and marshes.

3. The glacier made upland farming more difficult.

Of what use are the lakes left by the glacier?

Of what use are the marshes due to the action of the glacier?

How do we know that the surface of New England was really so greatly changed by the glacier?

Why is it that the northern part still remains thinly settled?

What are the common means of travel in the wilderness?

What occupations are carried on in the thinly settled parts?

What are the causes which led to the great development of the fishing and whaling industries?

What finally led to manufacturing taking the place of farming as the leading industry?

1. The poor returns from farming on the uplands led people to seek other lines of work.

2. The abundance of water power for running mills and factories.

3. The opportunities to get raw products, first by water and later by rail.

4. The ingenuity of the people in inventing machinery.

What disadvantages does New England offer for manufacturing?

1. Coal is found in the northeastern part (Nova Scotia and New Brunswick) but is lacking in Southern New England.

2. The distance which most raw products have to be shipped.

In what lines of manufacturing have the people become most expert?

How can we explain the fact that the coast region contains much the larger part of the population?

1. The most of the best farm land is in the lower valleys near the coast.

2. The coast region is more accessible and has a milder climate.

How is it that the farming industry began to decline in importance as the Mississippi Valley settled up?

1. The attractions of the prairies drew people away from their hill farms.

2. The staple foods could be raised upon the prairies and, as soon as there was means of transportation, shipped to New England cheaper than they could be grown there.

What effect has the growth of the great New England cities had upon farming in that region?

1. The cities require a great quantity of fruits and vegetables which are more palatable and wholesome if raised near by.

2. The cities offer a market for eggs, milk, cheese and butter the production of which in the neighborhood is encouraged.

Have the demands of the cities affected the growing of corn and wheat?

Has the growth of great cities affected any other industries?

1. Large quantities of fish are required.

2. The need for building material has developed important industries.

3. The necessity for recreation for city dwellers has resulted in many summer hotels at the beach and in the country.

Why are the forests now thought more of than in the times of the colonies?

What are some of the leading reasons for using with care the remaining forests?

1. Wood is essential in many industries.

2. Forests aid in maintaining the summer flow of the streams.

3. Forested mountains form summer play grounds

What national forest has been established in this region?

What are the chief causes determining the location and growth of the cities of New England?

A. The first cities grew up on the best and most accessible bays (Boston, Salem, Gloucester, Portland, New Bedford and Halifax).

B. Deep tidal estuaries reach back to the Fall Line. Here grew up Hartford, Norwich, Haverhill, Taunton, Lewiston, Augusta and Bangor.

C. Inland cities grew up beside waterfalls and rapids (Augusta, Lowell, Lawrence, Manchester, Nashua, Concord and Waterbury).

D. Railroad centres and rich farm lands determined the position of other cities (Springfield and Worcester).

Why do we sometimes call the Adirondack Mountains "Outlliers" of the Appalachians?

How does it happen that the Adirondacks still remain almost a wilderness?

What great importance do the Adirondacks possess in their wild condition?

PROBLEMS OF THE NEW ENGLAND REGION

Why is it that the northern part of the New England Region, though fully as accessible by water as the southern part, and having similar forests, rocky soil, and rapid streams still remains thinly settled, while the southern part contains the densest population of the continent?

New England has comparatively few minerals, only one coal mining region, and one other natural resource; timber. How is it in the light of these

disadvantages it has become one of the chief manufacturing regions of the continent?

Why is so little of the coal mined upon Cape Breton Island and in the northern part of Nova Scotia used in Southern New England although there is good water transportation?

Why do the people of New England import the greater part of their food supplies although the larger part of the region can be cultivated.

In light of the fact that so much of the soil of New England is poor would it, or would it not have been an advantage if the region had never been covered with glacial ice? Discuss lakes, water power, swamps.

Why is it that although city life offers many inconveniences over a life in the country that more than three fourths of the people make their homes in cities?

What is the reason that in Colonial Days every family was obliged to raise a part of its food, while to-day so many do not engage in farming of any kind?

Why is it that Boston though farther away and blocked by mountains from easy communication with the west has a larger foreign commerce than Philadelphia?

Why are many varieties of food fish scarcer than they used to be and why do they have to be protected by law ro save them from extinction although they have the whole ocean in which to live?

II. THE SOUTHERN DIVISION OF THE PIEDMONT REGION:—THAT LONG STRETCH OF FERTILE HILL-LAND LYING BETWEEN THE COASTAL PLAIN AND THE APPALA-

CHIAN MOUNTAINS:—A PICTURESQUE LAND ENJOYING AN AGREEABLE CLIMATE AND DOTTED WITH PROSPEROUS FARMS AND PLANTATIONS.

What is the meaning of the word "Piedmont" as applied to the region we are studying?

What is the extent of this Southern Piedmont Region?

Where do we draw the line between the Piedmont and the Coastal Plain?

In what way does the Piedmont Region differ from the Coastal Plain?

1. The streams run more swiftly in the Piedmont.
2. The soil of the Piedmont is more uniform.

How is it that the soil is so much more productive than that of the New England Hills?

Why is the Piedmont Region more thickly settled than the Coastal Plain?

1. The climate is more agreeable and the country more attractive.
2. A large part of the cotton belt lies in the Piedmont Region.

To what sort of industries is the Piedmont Region naturally adapted?

1. Farming is the leading industry.
2. Manufacturing will become more important.
3. Mining is not important.

Where do we find most of the cities of the Piedmont Belt?

How is it that Atlanta, lying within the Piedmont Region, has become such an important city?

Why do we include New York among the cities of the Fall Line since there are no rapids or waterfalls there?

What conditions have made New York City the Metropolis of the Continent?

1. The city is situated upon a good harbor.
2. The city lies at the mouth of a navigable river.
3. The city is connected with the Great Lakes by a canal.

SPECIAL PROBLEMS OF THE PIEDMONT REGION

Why is it that the Piedmont Region, though more remote and less easily farmed because of the hilly surfaces, was more sought after by the early settlers than the Coastal Plain?

Why is it that the northern part of the Piedmont Region, though having a cold climate, settled faster than the southern part which has a mild climate and is far more extensive?

Why is it that Philadelphia, though at one time a more important city than New York, finally lost first rank and became second of the Atlantic Coast cities?

The streams of the Southern Piedmont Region, though not as rapid as those of New England, possess considerable water power. Why is it that cotton manufacturing did not develop early here since cotton is one of the chief products?

B. THE APPALACHIAN MOUNTAINS

A LONG AND IN PLACES NARROW BELT OF STEEPLY SLOPING MOUNTAIN RIDGES WHICH, THOUGH FORMING THE CENTRE AND LOFTIEST PORTION OF THE APPALACHIAN HIGHLANDS, HAVE NOT PRESENTED AS SERIOUS A BARRIER TO TRAVEL AS THE PLATEAUS TO THE WESTWARD.

What is the position and extent of the Appalachian Mountains?

How do these mountains compare with those of New England?

Why were such names as "Blue Ridge," "Blue Mountain" and "Great Smoky Mountains" given to different portions?

How is it that these mountains are in places easy to cross?

How is it that the interior valleys of this mountain country do not show the same lack of rain as the interior valleys of the Western Highlands?

How do the forest resources compare with those of the lower lands?

Why is it that the higher and more rugged portions still remain thinly settled?

1. The mountains are not favorable to farming.
2. The timber has been inaccessible.
3. The mining resources are of little importance.

What has been the influence of isolation on the dwellers in the mountains?

What is opening up this backward region?

1 The increasing scarcity of timber throughout the Northeastern States.

2. A growing appreciation of the beauty and healthfulness of this mountain region.

What great injury has been done to some parts of the mountains and hills?

1. The farmers have carelessly allowed the soil to wash.
2. The cutting of the forests on the mountain slopes has led to great damage from floods.

For what purpose is the government establishing the Appalachian National Forest?

C. THE GREAT APPALACHIAN VALLEY

THAT RICH AND FERTILE VALLEY LYING IN THE HEART OF THE APPALACHIAN HIGHLANDS AND FORMING A HIGHWAY ITS WHOLE LENGTH FROM THE VALLEY OF THE ST. LAWRENCE RIVER SOUTHWESTERLY NEARLY TO THE GULF OF MEXICO.

Just what do we mean by the Great Appalachian Valley?

How can we account for the Great Valley in the heart of the Appalachian Mountains?

Can we speak of the Appalachian Valley as one single valley?

Can we explain the strange behavior of the rivers of the Great Valley?

How accessible did the settlers find different portions of this valley?

1. The Hudson-Champlain Valley was easily reached.

2. The Shenandoah, Cumberland and Lebanon Valleys were also easily reached.

3. The Vclley of East Tennessee was difficult to reaah.

Why is it that the Great Valley was of so little assistance to the settlers pushing westward?

1. The Great Valley did not extend in the direction they wished to go.

2. To the west of the Valley rose the precipitous front of the Allegheny-Cumberland Plateau.

Were there no gaps in the plateaus by means of which the emigrants could reach the Ohio Valley?

1. The Mohawk Valley offered a good route westward.

2. The Cumberland Gap had many disadvantages.

Why is the Champlain Valley of little importance as a highway?

Why is it that the Valley of East Tennessee contains all the important cities of the Southern Highlands?

1. The valley is large, has a fertile soil and a favorable climate.

2. The valley contains valuable minerals.

What important product distinguishes the Great Valley from all other regions of America?

How can we account for the anthracite coal in the Great Valley while that of the Allegheny and Cumberland Plateaus is all bituminous?

What influence has the presence of anthracite coal had upon the development of industries?

What can we say of the scenery of Lake Champlain Region?

What has led to the Valleys of Virginia becoming famous as health resorts?

What has made Albany the first city of importance in the Great Valley?

What causes have favored the great industrial development of the Mohawk Valley?

SPECIAL PROBLEMS OF THE APPALACHIAN MTS. AND THE GREAT VALLEY

What are the most striking differences between the Appalachian Mts., the Adirondacks and the mountains of New England? Which are the easiest to travel through? Which have the most important natural resources?

Why is it more important to preserve large tracts on the mountains from being de-forested than it is in the valleys and on the coastal plains?

Since the Great Valley is such an attractive region, why did the pioneers seek to leave it and push still farther into the wilderness?

If it had been impossible to cross the barrier west of the Great Valley in the early days would you have preferred to take the opening at the northeastern end or the southwestern end in order to reach the Valley of the Ohio?

If there had been no Mohawk Valley which would likely have been the largest city upon the Atlantic Coast?

Taken as a whole is the Great Valley more noted for its agricultural or its mining resources?

D. THE ALLEGHENY-CUMBERLAND PLATEAU

A REGION WHOSE BOLD EASTERN FRONT HAS FROM THE EARLIEST TIMES DOWN TO THE PRESENT OFFERED A SERIOUS BARRIER TO TRAVEL AND TRADE:—A REGION PORTIONS OF WHICH ARE STILL THINLY SETTLED WHILE OTHER PORTIONS ARE EITHER DOTTED WITH PROSPEROUS FARMS OR, BECAUSE OF THEIR RICH TREASURES OF COAL, IRON AND PETROLEUM, HAVE DEVELOPED GREAT MINING AND MANUFACTURING INDUSTRIES.

What do we mean when we speak of the Allegheny-Cumberland Plateau?

What part of the plateau is the "Blue Grass" Region?

Why do we use the word "plateau" for this region since parts of it are often spoken of as "mountains?"

Into what bodies of water far removed from each other do the streams of the Allegheny Plateau flow?

How can we account for the many beautiful lakes upon the northern slope of the Allegheny Plateau while there are none upon the Cumberland Plateau?

How is it that the plateau is more difficult to cross than any other portion of the Appalachian Highlands?

1. The plateau rises precipitously from the Great Valley.
2. There are no gaps or good passes in the plateau.

How is it that the northern and western slopes of the Allegheny Plateau form such a rich farming district?

What can we say of the fertility of the lower slopes of the Cumberland Plateau?

Why is it that the higher parts of the Cumberland Plateau still remain very thinly settled?

1. The plateau is like a rough inhospitable island.
2. Farming is carried on under great disadvantages.
3. Lumbering and mining have developed slowly because of its inaccessibility.

How can we account for the wonderful caverns found in the Cumberland Plateau?

What part did the Allegheny Plateau play in the troubles between the English and the French?

What led to the establishment of Fort Duquesne where Pittsburgh now stands?

What industry early developed in the Allegheny Plateau because of the navigation afforded by the Ohio?

How is it that most of the Allegheny Plateau is so much more thickly settled and of so much greater commercial and industrial importance than the higher parts of the Cumberland Plateau?

1. The Allegheny Plateau contains a much larger area of accessible farm land.
2. There are vast beds of bituminous coal.
3. There are valuable deposits of petroleum and gas.

By what direct routes did the early settlers finally make their way across the Allegheny-Cumberland Plateau?

1. The northern route from Philadelphia up the Juniata River.

2. The middle route up the Potomac and across the Allegheny Front to Pittsburgh.

3. The Southern route led up the James River from Richmond.

What can we say of Boone's "Wilderness Road" across the southern part of the Cumberland Plateau?

What effect did the building of the National Pike and Cumberland Roads have upon Pittsburgh?

Why was it that the canal built along the National Pike Road and which lacked only 50 miles of being completed to Pittsburgh was finally abandoned?

What can we say as to the influence of the precipitous Allegheny front upon the relative importance of Philadelphia and New York?

PROBLEMS OF THE ALLEGHENY-CUMBERLAND PLATEAU

Although the Adirondack Mts. lie west of the Great Valley we include them in the New England Province. Why do we do this? What are some of the most important differences between the Plateaus and the Adirondacks?

Why is it that parts of the Allegheny-Cumberland Plateau settled more slowly than the far rougher and more inaccessible mountains of the Western Highlands?

Why is it that the mountaineers of the Cumberland Plateau have such poor and poverty stricken homes?

Why is it that though both the Allegheny and Cumberland Plateaus contain important minerals and are covered with valuable forests that the former developed a large population and important indus-

tries while the latter remained largely in its natural condition?

Why is it that the Allegheny-Cumberland Plateau though lying on the interior slope of the Appalachian Highlands receives as much rain as the coastal slope?

Why is it that the northern coniferous forest extends far south in the Appalachian region while upon both sides of the highlands the forests are formed of hardwood trees?

Why is it that dairying and fruit growing are very important upon the northern slopes of the Allegheny Plateau, while in the valleys and upon the lower slopes of the Cumberland Plateau the raising of tobacco, flax and blooded horses is important?

THE BASIN OF THE GREAT LAKES

A REGION OF INNUMERABLE LAKES, BOTH GREAT AND SMALL, WHICH TOGETHER WITH THE RIVER DRAINING THEM, AFFORD A WATER ROUTE FROM THE HEART OF THE CONTINENT TO THE ATLANTIC OCEAN:—A REGION NOTED IN EARLY DAYS FOR ITS FURS, LATER FOR ITS FERTILE FARMS AND LUMBER INDUSTRIES, AND LAST OF ALL FOR ITS WONDERFUL DEPOSITS OF IRON AND COPPER.

What part of North America do we include in "The Basin of the Great Lakes?"

What does our heading suggest as to the characteristic surface features of this region?

How is it that the southern part has a milder climate than Central New England lying in the same latitude?

1. A land in the heart of a continent has ordinarily a colder winter and a hotter summer climate than a coast land in the same latitude.

2. The large bodies of water in the lake region modify the cold of winter and the heat of summer.

3. The winter winds of New England usually blow off the land and are cold.

How can we explain the presence of so many large lakes in this part of North America?

1. A great glacier once spread over the region as it did over New England.

2. The surface is so flat that the basins the glacier formed are very large.

How has the low watershed about the basin of the Great Lakes increased its accessibility?

How is it that although the surface of the northern part is rocky like New England the southern part has a deep rich soil?

1. The glacier dropped, toward its southern end, rock which it had scraped off the northern hills.

2. Lakes and streams sorted and re-arranged this material.

What leads us to believe that the glacier gave rise to Niagara Falls?

What leads us to believe that the Great Lakes were higher once than they are now and that all except Ontario emptied into the Ohio and Mississippi?

1. Beaches of an ancient shore line appear many feet above the level of the three central lakes.

2. The watershed to the south is in places very slightly elevated above the present level of the lakes.

3. The Illinois River rises close to Lake Michigan and the Wabash close to Lake Erie.

How can we explain the fact that these lakes now

empty northeastward into the St. Lawrence instead of southerly?

How is it the French entered this region ahead of the English?

How did the low watershed to the west and south of the Great Lakes make it easy for the French to press still farther into the wilderness?

What was the object of the French in penetrating this vast territory?

1. La Salle hoped to find a water route to China.

2. To obtain control of as much of the continent as possible.

3. To establish trade with the Indians.

Were there any obstacles to navigation in the St. Lawrence and Great Lakes?

Since Niagara Falls could not be passed how did the French succeed in reaching the upper lakes in canoes?

By what means has continuous navigation of the Great Lakes and the St. Lawrence River been made possible?

What can we say as to the value of the water outlet recently opened from Lake Michigan to the Mississippi River?

Why is it that in spite of a continuous water route from the lake region down the St. Lawrence the larger part of the Eastern bound freight goes another way?

1. The St. Lawrence river route is frozen up a part of the year.

2. The mouth of the river is in Canada while the most of the freight comes from the United States.

How did the early settlers take advantage of the low watershed between the lakes and the Ohio to improve their shipping facilities?

1. The Wabash and Erie canal was built connecting Lake Erie with Evansville, Illinois.

2. The Ohio and Erie Canal connected Cleveland on Lake Erie with Portsmouth on the Ohio.

Why is it that many of the canals were abandoned after a few years?

By what two routes did most of the early settlers reach the lower lake region?

What influence have the Great Lakes had upon the development of this region?

1. The large bodies of water modify the climate.

2. They encourage the growth of industries through cheap transportation.

3. Their picturesque shores attract many summer visitors.

What conditions particularly encourage the development of farming?

1. The more productive soils lie in the warmer southern part.

2. Easy communication is a great advantage.

Why are the Great Lakes of more value to the farmer and manufacturer than is the Mississippi River?

What important natural resources are possessed by the region of the Great Lakes?

1. Extensive forests.

2. The rocky hills of the north are rich in minerals.

3. In the central part are beds of salt and gypsum.

4. In the southern part, coal, petroleum and natural gas are found.

How has the presence of the Great Lakes made possible the development of the iron mines west of Lake Superior?

Why is the iron ore carried to Cleveland and Pittsburgh instead of being smelted where it is mined?

What three stages have the cities of the Lake Region gone through?

1. Indian trading posts.
2. Growth due to needs of trade and commerce.
3. Growth due to manufacturing.

What are the reasons for Chicago becoming the second city of the continent?

Why is it that meat packing has become one of the leading industries of Chicago?

What are the relative advantages of Chicago and Duluth as corn and wheat shipping points?

How does Buffalo compare with Chicago as regards advantages of location?

What advantages and disadvantages have Cleveland and Toledo for manufacturing purposes as compared with Pittsburgh?

Why is it that Montreal has become more important than Quebec in recent years?

Why have all the largest cities grown up in the southern part of the Lake Region rather than in the northern part?

1. The southern part is adjacent to abundant fuel and raw products, especially of the farm.

2. The southern part borders upon the great east and west highway across the United States.

3. The country bordering the most northerly of the Great Lakes is rocky and cold.

SPECIAL PROBLEMS OF THE BASIN OF THE GREAT LAKES

Would it be an advantage or disadvantage if the Great Lakes now emptied into the Mississippi River? Why is it probable that Ontario never emptied southward?

Is it likely the opening of the Panama Canal will divert any large amount of freight from the St. Lawrence outlet to the Mississippi River?

Why is it that the hardwood forests of the southern part of the Lake Basin were cleared away faster than the coniferous forests in the northern part of the basin although the former were less valuable as a source of building material?

If the St. Lawrence River and Erie Canal were blocked what other waterways to the ocean would become very important?

Why is it that so little use is now made of canals connecting Lake Erie with the Ohio River though much of the country is almost flat?

The situation of the city of Chicago has several disadvantages, such as marshy ground, lack of good drainage, difficulty of getting good drinking water. What has made it, in spite of these things, the second city of the continent?

THE CANADIAN PLAIN

A VAST ALMOST UNINHABITED REGION LYING EAST OF THE ROCKY MOUNTAINS AND EXTENDING FROM THE BASIN OF THE GREAT LAKES NORTH TO THE ARCTIC OCEAN.

What does the title suggest as to the extent of the Canadian Plain?

What does the title suggest as to the character of the surface?

What does the lack of inhabitants together with the situation of the region suggest?

1. The region must be cold and inhospitable.
2. It must contain little to attract people.

3. It must be difficult of access.

What must once have been the condition of this land to permit the formation of the great glaciers that spread over it?

1. The land must have been higher so as to permit the ice sheets to flow toward the south.

2. One ice sheet originated in Northern Labrador, another N. W. of Hudson Bay.

Are we not right in looking for great differences in climate and vegetation in a region as extensive as the Canadian Plain?

1. The southern part is forested.

2. The northern part is an almost barren plain.

To what three points of the compass can we journey in a canoe from the margin of the plain a little west of Lake Superior?

A. THE REGION OF THE CONIFEROUS FOREST

A ROCKY WILDERNESS OF STREAMS, LAKES AND MARSHES, MORE OR LESS FORESTED AND INHABITED CHIEFLY BY INDIANS AND WANDERING WHITE HUNTERS, BUT CAPABLE OF GREAT INDUSTRIAL DEVELOPMENT.

Just what lands do we include in the coniferous forest?

How can we account for the innumerable lakes and marshes?

Why should we expect the canoe to be the chief means of travel in this wilderness?

1. The thick growing trees and moss covered marshes make land travel very difficult and fatiguing.

2. The countless lakes and streams permit one to go almost every where in a canoe.

Why do the forests at present possess so little value?

What attracts people to this land where life conditions are so hard?

1. The hunting of fur-bearing animals.
2. Explorations and search for valuable minerals.

Why is it that we know so little about the interior of Labrador?

Why is it that the Labrador Coast is as inhospitable as the interior?

Why does the western part of the Canadian Plain in the same latitude as Labrador have a milder climate?

1. Labrador is almost surrounded by Arctic waters and has a cold current along its northern shore.

2. The western part of the plain is affected somewhat by winds from the Rocky Mountains.

How is it that a city of importance is growing up on the southwest border of the forest area?

Why is it that the wheat of the northern prairies is not shipped to market from Winnipeg by way of Hudson Bay instead of the long rail and boat route to the east?

B. THE BARREN LANDS OR TUNDRAS

THAT COLD CHEERLESS REGION LYING NORTH OF THE CONIFEROUS FOREST AND EXTENDING TO THE ARCTIC OCEAN:—A REGION ALMOST WITHOUT LIFE FOR NINE MONTHS IN THE YEAR BUT DURING THE SHORT SUMMER A VERITABLE PARADISE OF BIRDS, ANIMALS AND FLOWERS.

What sort of a picture does the name "barren lands" bring up in our minds?

In how far can we liken this region to a desert?

How is the tundra transformed during the short summer months?

1. Animals come here to feed and birds to nest.

2. The long warm days of summer bring out a multitude of flowers and many berries.

Why is winter the easiest time to travel in the Barren Lands?

In how far can the Tundras be made useful to man?

Why do we know so little of the islands lying in the Arctic Ocean north of the continent?

SPECIAL PROBLEMS OF THE CANADIAN PLAIN

Has the fact that most of the Canadian Plain was long covered with a glacial ice sheet been an advantage or disadvantage as regards exploration and settlement? Compare with the effect of the ice sheet on New England.

What is there in the nature of the Arctic coast to lead one to believe that it has been partly submerged?

How is it that in spite of their very short summers the arctic lands so quickly loose their barren appearance and become animated with life?

What advantage is it to the future welfare of the continent that the Northern Forest is at present inaccessible?

What first led the Indians and Eskimos to make homes in this wintry land where they often suffer from hunger, while there are more comfortable lands to the south?

What is the reason that, though the Barren Lands are almost level over wide areas, the building of roads across them would be very difficult?

What are the conditions which are making Winnipeg a large city in spite of its far northern location?

GREENLAND—THE LARGEST ISLAND IN THE WORLD

Are we right in calling Greenland an island?

Why do we speak of Greenland as a stepping stone to America?

How is it that the island is called "Green" since nearly all of it is covered with a permanent ice sheet?

What has attracted people to this cold icy land?

THE OZARK MOUNTAIN REGION

AN UPLAND RISING LIKE AN ISLAND IN THE MIDST OF THE SOUTHERN PRAIRIES.

Where shall we look for this island in the prairies?

Does this highland really deserve the name of mountains?

What does the vegetation tell us about the rainfall compared with the surrounding lowlands?

How do the products differ from those of the surrounding prairies and river lowlands?

Why do the Ozark Highlands, though possessing a fertile soil and a climate that is healthier than the river lowlands remain more thinly settled?

1. The hill land is not as easily cultivated as the prairies.
2. The hill land is not as accessible to market as the lower lands.

THE REGION OF THE PRAIRIES

THAT GREAT AREA OF ALMOST LEVEL AND, FOR THE MOST PART, TREELESS COUNTRY OCCUPYING THE HEART OF THE UPPER MISSISSIPPI VALLEY AND EXTENDING MORE THAN 2000 MILES NORTH AND SOUTH BETWEEN THE EASTERN AND

NORTHERN FORESTS ON THE ONE HAND, AND THE DRY PLAINS ON THE OTHER :—A REGION OVER WHICH THE BUFFALO ONCE WANDERED IN COUNTLESS NUMBERS BUT WHICH HAS NOW BECOME THE CORN AND WHEAT GRANARY OF THE CONTINENT.

What sort of a picture do we have in our minds when we speak of the prairies?

Why is it difficult to mark exactly the limits of the prairies?

1. The level prairies blend into hilly land on the east.

2. The treeless prairies blend into forested lands on the north and east.

3. The well-watered prairies blend into the dry plains on the west.

Do we find any trees upon the prairies?

How can we account for less rain in the prairie region than farther east?

What are the characteristics of the prairies that made them so eagerly sought by the pioneer settlers pushing westward across the Appalachian Mts.?

1. The prairie lands did not have to be cleared of trees.

2. The rainfall was abundant and the temperature about the same as that to which they were accustomed.

3. Navigable rivers flowed through the prairies.

Were the suothern and northern parts of the prairie region as easily settled as the central portion?

1. The northern part long remained unsettled because it was thought to be too cold for farming.

2. The extreme southern part is very hot in summer.

What disadvantages does the prairie region offer for homes?

What dangerous storms occur in the prairie region?

1. Blizzards occur in winter.
2. There are cyclones in spring and summer.

How can we account for the many kinds of soil in the prairie region?

What interesting animals once lived upon the prairies?

How far did the early French explore the prairies?

What industry first led the American explorers into the Western prairies?

In how far were the rivers an aid to the settlement of the prairies?

What made the river traffic much more important fifty years ago than it is now?

Why did the river traffic finally decrease although the business of the region greatly increased?

1. The building of the railroads.
2. The market for the prairie products was in the East rather than the South.
3. The rivers often became very low in summer.

What is now being done to make the rivers of greater value for navigation?

How has the climate of different parts influenced the distribution of the various farm industries?

1. Wheat is grown in the northern part.
2. Corn is grown in the central portion.
3. Cotton is the chief product in the South.

By what routes are the products of the prairies sent to market?

What other important industries besides farming have developed in the prairie region?

1. The mining of coal and the sinking of oil and gas wells.
2. Manufacturing along many different lines.

Why is it that the greater part of the corn raised in the Central Prairie Region is consumed there while the cotton and wheat are shipped away?

What were the chief influences determining the location of the early towns?

What are the reasons for the location of the present great cities?

1. Water power as shown in the case of Louisville, "the Falls City" and Minneapolis at the Falls of St. Anthony.

2. Centres for river trade as Omaha, Kansas City and St. Louis.

3. Railroad centres in rich farming and coal mining districts as in the cases of Indianapolis and Springfield.

SPECIAL PROBLEMS OF THE PRAIRIES

Why should we include such a vast region as that just studied under the single name of Prairies since the climate and productions differ so greatly in different parts?

Is it possible that lands may be treeless from other causes than lack of rain? Mention any places that you know of in well watered regions where there are no natural forests and give your reasons for the lack of trees.

Why should we expect to find the wild animals of the prairies different from those of forested regions?

Why is it that the Central Prairies settled up much faster than the valley of the lower Mississippi although the latter region possesses rich soil and is nearer the ocean?

Why did so many of the New England farmers leave their homes where they were comparatively near markets and move to the Western Prairies where for many years lack of cheap transportation made it impossible to sell much of their produce at a profit?

How can we explain the fact that the Central Prairies, though producing the greatest quantity of corn of any part of the continent, also support a greater number of stock to the square mile than any other?

Why, if the prairies were naturally so rich in grass, do we not find them given over to great stock ranches like those upon the Great Plains to the west?

How is it that the prairie farmer can now send produce to New England and sell it cheaper than the farmers there can raise and sell the same things?

Why is it that the portion of the Prairie Region lying between the Upper Mississippi and Ohio Rivers is dotted over with cities noted for their manufacturing industries though there is little water power and the richness of the soil would indicate agriculture as the leading industry?

THE GREAT PLAINS

THE WESTWARD EXTENSION OF THE PRAIRIES:—THAT BROAD REGION RISING VERY GENTLY FROM THE PRAIRIE LOWLANDS TO THE FOOT OF THE ROCKY MOUNTAINS:—A DRY AND TREELESS LAND THE DREAD OF THE EARLY EMIGRANTS BOUND FOR THE CALIFORNIA GOLD FIELDS.

What is the position and extent of the Great Plains?

Why do we sometimes call the Plains the "High Prairies?"

1. The surface of the Plains is much like that of the Prairies.

2. The Prairies occupy the heart of the Great Interior Lowland.

3. The Plains reach a height of nearly a mile where they meet the Rocky Mts.

How does the "Chinook Wind" modify the temperature of the Western Plains?

How has the problem of fuel and lumber been solved?

In what way are the Black Hills very interesting?

How can we compare the Black Hills to an island?

Of what great importance are the Black Hills?

1. The Black Hills receive a much greater rainfall than the Plains about them.

2. Because of the rainfall there are forests supplying fuel and lumber.

3. The Hills contain valuable deposits of gold and other minerals.

What first called adventurous explorers across the Plains and into the Rocky Mountains?

Why is it that the early travelers across the Plains made so little use of the streams?

In what parts of the Great Plains did farmers first succeed in making homes?

1. The rainfall of the eastern part is enough to grow crops ordinary years.

2. Homes were successfully established upon the river bottoms of the western part where the soil was more moist and water easily obtained.

Why is it that stock raising became the first important industry of the Great Plains?

1. A large part of the Plains was found too dry for farming but supported nutritious grasses.

2. The marketing of cattle did not depend upon railroads.

What has irrigation done to change life conditions upon the Great Plains?

1. Irrigation has made possible the farming of the dry semi-desert upland.

2. Irrigation has made crops certain in moister portions of the Plains where there were otherwise crops a part of the time.

3. Irrigation is causing the disappearance of the great cattle ranches.

4. Irrigation is making possible a dense population where otherwise it would be very scattering.

In what way is the government aiding the work of irrigation?

What influences have determined the location of the important settlements?

1. Streams and waterfalls have been important.

2. The needs of mining industries in the mountains adjoining have been influential in determining location of some cities.

How can we explain the fact that railroad building is easy on the plains although their western margin has an elevation of 5000 feet?

Why do all the railroads of the plains have an easterly and westerly direction instead of a northerly and southerly one?

SPECIAL PROBLEMS OF THE GREAT PLAINS

Since the surface of the Great Plains is so much like that of the Prairies why do we not call the whole region by the same name?

Why is it that the Great Plains, though nearer the Pacific Ocean from which the storms come than are the Prairies, receive so much less rain?

Why is it that the cattle and sheep on the Plains are allowed to wander over great areas (ranges) while in the Eastern States they are kept in small pastures? What advantages and disadvantages has each method?

What are the advantages and disadvantages of an irrigated farm upon the Plains compared with one watered by rains upon the Prairies?

Why is cattle raising likely to remain the leading occupation of large areas of the Plains? Discuss from point of view of water supply and cold climate due to elevation.

THE WESTERN OR CORDILLERAN HIGHLANDS

A REGION OF LOFTY PLATEAUS, RUGGED MOUNTAINS, DEEP CANYONS AND VAST DESERTS:—A REGION THAT EARLY BECAME RENOWNED FFR MINERALS OF ALMOST EVERY KIND BUT IS ALSO VALUED NOW FOR ITS FORESTS AND IRRIGATED FARMS.

In what ways are the Western or Cordilleran Highlands of greater importance than the Appalachian Highlands?

1. The Cordilleran Highlands are of far greater extent.

2. The Cordilleran Highlands are much loftier and more rugged.

3. The Cordilleran Highlands have a greater influence upon the rainfall.

4. The Cordilleran Highlands contain untold stores of mineral wealth.

Who were the first people to tell us something about the Cordilleran Highlands?

1. The Spanish explored the Southwest and the Plateau of Mexico.

2. The Hudson Bay Fur Co. established posts in the northern part.

3. The Russians occupied the North Pacific Coast for a time.

4. The Lewis and Clark Expedition crossed the Highlands between the upper Missouri and the mouth of the Columbia.

A. THE ROCKY MOUNTAIN SYSTEM

THOSE LOFTY MOUNTAIN RANGES WHICH RISE UPON THE EASTERN SIDE OF THE HIGHLANDS, EXTEND FROM THE NORTHERN END OF THE MEXICAN PLATEAU TO THE ARCTIC OCEAN AND FORM THE GREAT WATERSHED OF THE CONTINENT: MOUNTAINS WITH ONLY ONE IMPORTANT GAP—THAT THROUGH WHICH THE MOST OF THE PIONEERS MADE THEIR WAY TO THE PACIFIC COAST.

What do we mean by "Rocky Mountain System?"

What do we mean by saying that the Rocky Mountains form the watershed of the Continent?

If the rivers were navigable in what different directions could we journey by water from the Rocky Mountains?

1. We could reach the Gulf of Mexico by the Missouri, Mississippi and other rivers.

2. We could reach the Gulf by the Rio Grande river.

3. The Colorado would take us southwesterly to the Gulf of California.

4. The Snake and Columbia rivers would take us westerly to the Pacific.

5. The Yukon River would take us northwesterly to Behring Sea.

6. The McKenzie river should leave us in the Arctic Ocean.

7. The Saskatchewan and Nelson Rivers leave us in Hudson Bay.

How can we account for forests on the Rocky Mountains while the plains and plateau from which the mountains rise are treeless?

What advantage is it to the surrounding country that snow instead of rains usually falls on the mountains?

How is it that the Rocky Mountains, though generally so high and steep, were easily crossed in certain places by the pioneers?

Why did few of the pioneers go around the southern end of the Rockies to reach the Pacific Coast?

What are the difficulties connected with travel in the far Northern Rockies?

How did the dangers of mountain travel in the early days compare with the dangers of the plains and plateau?

How does the presence of the Rocky Mountains both benefit and injure the plains to the eastward?

What world famed "Wonderland" is found in the Central Rockies?

What were the early industries in the Rocky Mountain Region?

1. The first white people were hunters and trappers.

2. The discovery of gold and silver and copper led to mining.

3. Stock raising.

To what is due the fact that general farming and stock fruit growing have now become so important?

1. The employment of irrigation.

2. The building of railroads.

3. The discovery that the best of apples could be produced.

Why is it that manufacturing continues to be of so little importance in spite of abundance of water power and fuel?

What conditions have determined the location of the leading cities?

1. The situation of valuable mineral deposits.
2. Junction of trade and travel routes.
3. Farming districts supplied with water for irrigation.

What in conclusion are the leading things for which we value the Rocky Mountains?

1. They gather rain from the clouds to feed many rivers.
2. They contain deposits of almost every kind of mineral.
3. They possess coniferous forests of vast extent.
4. They form, together with the Sierra Nevada Mts., the finest summer recreation grounds on the continent.

SPECIAL PROBLEMS OF THE ROCKY MOUNTAINS

Why do we say the Rocky Mountains form the continental divide while the Sierra Nevada-Cascade range far to the west is fully as high?

Why is it that the mountains though rough and difficult to traverse settled more rapidly than the plains and plateau at their feet?

How is it that the Rocky Mountains have been settled by stages during each of which the industries were different?

Why is it that the Northern Rockies while not as high as the Central Rockies are far more difficult to explore?

Why is it that mining has become of much greater importance in the mountains than upon the plains and plateau?

B. THE SIERRA NEVADA-CASCADE RANGES

THOSE LOFTY MOUNTAIN RANGES RISING NEAR THE WESTERN BORDER OF THE CENTRAL CORDILLERAN HIGHLANDS:—RANGES POSSESSING THE MOST WONDERFUL SCENERY, FORESTS OF GIANT TREES AND VAST STORES OF GOLD:—THE LAST BARRIER IN THE PATH OF THE EMIGRANTS TO THE PACIFIC COAST.

Why do we study the Sierra Nevada and Cascade Ranges together, notwithstanding the fact that they are very unlike in character and origin?

1. They form a continuous mountain barrier on the west of the plateaus as the Rocky Mountains do on the east.

2. At their western base lie the Pacific Valleys.

As regards height and ruggedness how do the Sierra Nevada-Cascade Ranges compare with the Rocky Mountains?

In what respects do the Sierra Nevadas differ from the Cascades?

1. The Sierra Nevada mountains owe their great height to earthquake movements.

2. The Southern Cascade Range was formed by volcanic action.

3. The northern Cascades were formed by an upward folding of the earth.

What do the dense forests of great trees tell us as to the climate?

How can we account for the fact that though these mountains receive so much rain and snow that irrigation is necessary in the valleys at their base?

Why is it that in ascending the western slope of the Sierras we go through so many different climates?

Why is it that the early pioneers found the Sierra Nevada Mountains so difficult to cross?

1. There are no low passes.
2. The eastern slope is very steep.
3. Snow covers the summit more than half the year.

How is it that Fremont's Party came near perishing in the snows of the Sierra Nevada Mts. (Fremont's First Expedition)?

What can we learn about the dangers of mountain travel from the sufferings of the Donner party?

Why are the Cascades equally difficult to cross although they are much less rugged than the Sierra Nevadas?

1. The Cascades are covered with very heavy forests.
2. The rivers that cross these mountains flow in Canons.

Which of the two mountain ranges we are studying affords the most picturesque scenery?

1. The Sierra Nevadas are very high as a whole, have deep canons but no great peaks standing out by themselves.

2. The Southern Cascades possess lofty cone-shaped volcanic peaks rising many thousands of feet above the general level of the range.

3. The higher slopes of the northern Cascades are covered with glaciers, while there are few glaciers in the Sierras.

What strange catastrophe formed Crater Lake on the crest of the Cascades?

How can we account for the hundreds of beautiful lakes in the Sierra Nevada-Cascade Ranges?

1. The glaciers that once covered the mountains formed the larger number.

2. Some were formed as a result of molten lava flowing across valleys.

From what we have already learned of the eastern part

of the continent what use should we think might be made of these lakes?

How is it that the rivers of the Cascades are often not formed by the union of many little streams but start in enormous springs?

1. Although heavy rains and snows fall on the Cascades the lava is so porous that most of the water sinks instead of flowing away on the surface.

2. The percolating waters collect in underground streams which come to the surface as great springs.

What mineral discovery in the Sierra Nevada Foothills changed the whole history of the Pacific Coast Region?

In what respects are the mountains of the Cordilleran Highlands of much greater use to us than are the mountains of the Appalachian Highlands?

Why are the methods of lumbering in the East unsuited to the region which we are studying?

What would have been the effect upon the settlement of the interior of the continent if the Cordilleras had occupied the place of the Appalachians?

In how far are we overcoming the Sierra Nevada-Cascade barrier?

Have the Sierra Nevada-Cascade Ranges on the whole been an advantage or disadvantage to the settlement of the Pacific Slope?

1. These mountains contain untold wealth in minerals.

2. These mountains are covered with the finest coniferous forests in the world.

3. The mountain streams supply water for irrigation.

4. The mountain streams afford power for generating electricity.

5. The mountains afford delightful summer camp grounds.

6. The magnificient scenery attracts visitors from all parts of the world.

7. The mountains offer a barrier to trade and travel.

8. By cutting off the moist winds the mountains have helped to make a desert of the Southern Plateau region, but at the same time they supply water to irrigate a part of this desert.

SPECIAL PROBLEMS OF THE SIERRA NEVADA-CASCADE RANGES

Why do we give the name "Coast Ranges" to the mountains extending north from the Fraser River region instead of "Cascades" of which they appear to be a continuation?

How do the railroads crossing the Sierra Nevada Mountains manage to run winter trains without interruption since the wagon roads are closed for six months?

By what routes could freight from the East reach San Francisco without crossing either the Cascades or Sierras?

If the long gentle western slope of the Sierras occupied the place of the short steep eastern slope what would be the effect upon the development of the valleys on either side? Discuss from point of view of the need of water and the relative amount upon the two slopes.

How is it that although the volcanic portion of the Cascade Range has a heavy rain and snow fall and is covered with dense forests that the traveler finds much less water than in the Sierras?

What is the story of the making of the great volcanic peaks of Shasta, Hood, Ranier and Baker?

Why is it that in the volcanic portion of the Cascades there are almost no minerals while in the Sierras mining is the chief industry?

C. THE INTERIOR PLATEAUS

THAT LONG REGION EXTENDING FROM NORTH TO SOUTH THROUGH THE HEART OF THE CORDILLERAN HIGHLANDS AND WHICH THOUGH HAVING IN GENERAL A PLAIN-LIKE CHARACTER IS BROKEN BY MANY MOUNTAIN RANGES, AND BECAUSE OF ITS GREAT EXTENT IN LATITUDE AND WIDE RANGE IN ELEVATION HAS A CLIMATE VARYING FROM VERY COLD IN THE NORTH TO VERY HOT AND DRY IN THE SOUTH.

What can we say as to the position and extent of the Plateau Region?

How is it that the Plateau Region possesses such a variety of climates?

1. The Plateau extends through the heart of the Highlands from the Arctic to the Tropics.

2. The greater part of the Plateau is shut in on the east and west by mountain ranges.

3. The plateau varies greatly in elevation, ranging from 8000 feet above the sea to 265 feet below the sea level.

1. THE ALASKAN HIGHLANDS:—THAT FAR NORTHERN REGION ONCE THOUGHT TO BE ALMOST WORTHLESS BUT NOW KNOWN TO BE RICH IN GOLD AND OTHER MINERALS.

What is the position of the Alaskan Highlands?

By what routes is this region most easily reached?

1. From Skaguay at the head of Lynn Canal across the mountains to the Yukon.

2. Across the mountains by way of Copper River.

3. Up the Yukon River from Bering Sea.

Why is it that the Yukon River, although it flows the whole length of the Highlands offers serious disadvantages as a highway?

1. The river is frozen about nine months in the year.

2. In late summer the water is so shallow in many places navigation is difficult.

What two distinct native races are found occupying different parts?

What must be the foods of the natives of this cold land?

How is it possible to carry on placer mining in a land frozen up most of the year?

To what extent is it possible to grow here the vegetable foods so much needed by the many thousands of miners?

What should we expect would be the conditions determining the locations of the cities and towns?

2. THE COLUMBIA PLATEAU:—THAT PART OF THE INTERIOR PLATEAUS NOTED FOR ITS VAST LAVA FIELDS, THE ACCUMULATIONS OF INNUMERABLE VOLCANIC ERUPTIONS THROUGH LONG AGES:—A PLATEAU BROKEN BY MOUNTAINS AND CANYONS AND HAVING ALMOST EVERYWHERE A RICH AND FRUITFUL SOIL ALTHOUGH TOWARD THE SOUTH AND SOUTHEAST THERE IS SO LITTLE RAIN THAT IRRIGATION IS NECESSARY.

What does the name "Columbia" tell us about the position of this plateau?

What can we learn from the lava as to the story of the plateau?

How have the difficulties in the way of navigating the rivers been partly overcome?

What difficulties occur in connection with the use of the streams for irrigation?

1. The Columbia River flows in a canyon.

2. The lower Snake River flows in a canyon at one place nearly a mile deep.

3. The Des Chutes River flows in a narrow canyon.

How has the rainfall determined the distribution of the people and their occupations?

1. The central and northern parts, including the region about the junction of the Snake and Columbia Rivers receives enough rain for grain, fruit and other products.

2. The southern part is dry but has rain enough for grasses to grow. Here stock raising is the chief industry.

3. The eastern part known as the Snake River Plains is a sagebrush desert.

4. The Blue Mts. rise in the heart of the plateau. Here are grasses for grazing, forests and mineral deposits.

What wonderful change is coming over the barren Snake River Plains?

1. The waters of the Snake River have been diverted into canals before they reach the Great Falls.

2. With the addition of water the soil and climate of the plateau have been found suited to fruit and a great variety of farm products.

How did the early "Oregon Trail" compare with that to California as regards difficulties encountered by the pioneers?

Why did the Columbia Plateau, much of it naturally attractive as a farming region, settle more slowly than did California?

What conditions have made the plateau especially noted for its apples and wheat?

At what places have cities sprung up?

1. At points where there is water power.
2. In rich-agricultural districts.

3. THE GREAT BASIN:—THAT STRANGE DESERT LAND WITH NO OUTLET TO THE OCEAN AND MORE DREADED BY THE EARLY EMIGRANTS THAN EVEN THE RUGGED SIERRA NEVADA MTS., A LAND AT THE TIME OF ITS DISCOVERY SEEMINGLY VALUELESS BUT NOW PROVING RICH IN MINERAL TREASURES.

What does General Fremont, the discoverer of the Great Basin, have to say about it in his report?

Just what do we mean by the term "Great Basin."

Why was this region so dreaded by the emigrants to California?

What conditions would you think must determine the location of the desert roads and trails?

How came that part of the Great Basin lying below the level of the ocean to be called "Death Valley?"

The map shows a number of lakes along the western margin and one great lake near the eastern side. Why does not the water from these lakes flow into Death Valley since that is the lowest part.

1. Each of the lakes lies in a little basin of its own.
2. These lakes do not receive water enough from the mountains near them to overflow their basins.
3. Many little basins contain water only during the winter season.

Has the desert proved to be the useless waste that people once thought it was?

1. The mountains of the desert are rich in minerals.

2. The beds of dried up lakes contain deposits of salts of different kinds.

3. Irrigation is making the land about the borders produce abundantly.

Why is it that many of the lakes once occupying basins in this desert are now wholly or partly dried up?

1. The rainfall was once greater than it is now.

3. The rainfall on the Wasatch Mts. was sufficient to make Great Salt Lake overflow and empty into the Snake River.

4. Pyramid lake was once a great body of water but did not overflow.

5. Owens lake emptied southward into desert basins now dry.

What first led to the great development of farming near Great Salt Lake?

To what extent is grazing carried on in those parts where there is no water for irrigation?

What causes have led to the growth of cities and towns in this desert land?

1. Salt Lake City owes its importance to the abundance of water supplied for irrigation by the Wasatch Mts.

2. Many mining cities are scattered throughout the desert.

4. THE COLORADO PLATEAU:—A REGION OF PLATEAUS ON THE WHOLE HIGHER AND BETTER WATERED THAN THE GREAT BASIN ALTHOUGH THE STREAMS HAVE WORN THEIR CHANNELS SO DEEP THEY ARE OF LITTLE USE FOR IRRIGATION:—A REGION RENOWNED FOR ITS ANCIENT CLIFF DWELLERS AND ITS MANY PICTUR-

ESQUE GORGES OF WHICH THE CANYON OF THE COLORADO IS ONE OF THE WONDERS OF THE WORLD.

What does the name "Colorado" tell us as to the location of the plateau?

How can we account for the wonderful scenery of the region?

How do the climate and resources compare with those of the Great Basin?

How can we explain the fact that stock raising is more important than farming?

How have the canyons affected travel and exploration?

Why is it impossible to make use of the Grand Canyon as a highway from the Rocky Mountains to California?

To what use will the water power in the canyons sometime be put?

What two very different types of Indians occupy the plateau?

1. The wandering Apaches who once lived chiefly by hunting.

2. The Pueblo Indians who live in stone houses and cultivate the ground.

What leads us to believe the Cliff Dwellers were the ancestors of the Pueblo Indians?

What brought the first white people into the region of the plateau?

Are there any mountains on the surface of the plateau?

1. In places rainwater has worn the sandstone of the plateau into mountain forms.

2. The volcanic San Francisco Mts. rise from the southern part of the plateau to 12,794 feet.

What other scenic features does the plateau possess besides deep canyons?

1. Wonderful natural bridges and strange erosion columns.

2. The Petrified Forest.

5. THE SONORA DESERT:—A REGION OF BARREN MOUNTAINS AND DESERT PLAINS WHERE THE LACK OF RAIN AND THE GREAT SUMMER HEAT HAVE LED TO THE DEVELOPMENT OF CURIOUS PLANTS AND ANIMALS:—A REGION ONCE THE DREAD OF THE TRAVELER BUT NOW, UNDER THE MAGICAL INFLUENCE OF WATER BEING TRANSFORMED INTO A GARDEN OF WONDERFUL RICHNESS.

What is the location of the region known as the Sonora Desert?

What early led men into this forbidding desert?

1. The Spaniards explored the desert in their search for gold.

2. The Santa Fe trail crossed the desert to California.

3. Early American trappers and prospectors braved the desert and the savage Indians.

Where is the water obtained that has made possible the transformation of the Sonora Desert?

1. The Colorado River flows through the heart of the desert, its muddy flood being supplied by the snows of the Rocky Mountains.

2. The Gila River flows through the eastern part, the great Rosevelt Dam holding its flood waters for summer use.

Why is it that the Gulf of California and the Colorado River are so little used by ships?

1. The Gulf lies remote from main lines of trade and travel.

2. The shores of the Gulf are almost uninhabited.

3. The Colorado River is swift and shallow.

What two parts of the desert is it possible to irrigate from the Colorado?

1. To the east of the mouth of the river lies the true Sonora Desert, one of the most forbidding parts of North America.

2. To the west of the lower river is the Colorado desert now known as the rich Imperial Valley.

What great work has the Colorado River been doing through the ages past?

1. Its waters loaded with silt have built a great and fertile delta across the Gulf of California.

2. The part of the Gulf cut off by the delta formed a great lake which finally dried up leaving in its place a barren desert and a bed of salt.

With what other deltas of the world can we compare that of the Colorado?

To what crops is the soil and climate particularly adapted?

How can we account for the peculiar character of many desert plants and animals?

How came the city of Tucson to grow up in the eastern part of the desert?

6. THE PLATEAU OR TABLELAND OF MEXICO: —THE TREASURE CHAMBER FROM WHICH THE SPANIARDS FILLED THEIR SILVER GALLEONS:—A PLATEAU SO LOFTY THAT IT HAS A TEMPERATE CLIMATE THOUGH UNDERNEATH A TROPICAL SUN.

What is the position of the Mexican Tableland?

How can we explain the fact that the Tableland is so difficult to reach from both the east and west coasts while it is easily entered from the north?

Are there any resemblances between the Plateau and the Great Basin?

What do the lofty peaks that rise from the southern part of the Tableland tell us about the forces which helped make it?

How can we explain the fact that the Tableland is in most parts so dry that irrigation is necessary?

Why is it that the Tableland has such a pleasant healthful climate although the coast lands on either side are hot and sickly?

What were the chief incentives of the Spaniards in their exploration and settlement of the Plateau?

How did the natives whom Cortez found upon the Plateau compare with the other native inhabitants of North America?

What does the fact that the people live mostly in stone or adobe houses tell us as to the climate and productions of the Plateau?

What reason have we for speaking of the Plateau as a "land of silver?"

Why is it that cattle raising forms such an important occupation while farming is very backward?

1. Cattle find pasture where the climate is too dry for growing crops without irrigation.

2. The most of the land is held in great estates the owners of which do not care to undertake more arduous work of building irrigation systems necessary for farming.

What does the fact that the millions of people inhabiting the Tableland carry on a small trade with other countries tell us as to their civilization and industries?

What is the meaning of the fact that in traveling over the Tableland under a tropical sun we are supplied with the same products that are grown in the Mississippi Valley far to the north?

What is there very interesting about the situation of the City of Mexico?

How is it that the Plateau of Mexico though possessing great mineral wealth still remains in a poor and backward condition?

1. The Plateau is not easily reached except from the north.

2. The greater part of the wealth is in the hands of a few.

3. Little manufacturing is carried on.

4. Frequent revolutions disturb the country and discourage work and development.

SPECIAL PROBLEMS OF THE INTERIOR PLAINS AND PLATEAU

Why is it that the sudden heavy rains known as "cloud bursts" are more dangerous and destructive in the desert regions than in forested lands?

Taking everything into account, which route from the Mississippi River to San Francisco would you prefer? Give reasons.

Why does the region immediately adjacent to the Gulf of California remain unsettled though it contains some of the richest land of the continent?

If you journeyed the whole length of the Interior Plateaus from north to south in what parts would your journey likely be the most pleasant? In what parts most disagreeable and dangerous? Give reasons.

On the whole is the existence of the Colorado River an advantage or disadvantage to the West?

What have been the most serious obstacles in the way of the development of the mineral resources of the Sonora Desert?

Why do we give the name *plateau* to the region between the Sierras and the Rockies and the name *plains* to the equally high land east of the Rockies?

What are the objections to opening a route over the Interior Plateaus to reach the mining districts in the Yukon Basin?

How is it that the hot deserts in the region of the lower Colorado River contain such a variety of native plants while no cultivated plants can live there without irrigation?

By what means did the original Indian population of the deserts manage to live while a white man would starve?

How is it that the English speaking peoples long believed the dry lands of the Southern Plateaus to be almost worthless while the Spaniards knew at once how to make them productive?

The route to the Pacific Coast was much easier by way of the Oregon Trail and the Columbia River than directly west to San Francisco. Why is it that so few people went the northern route?

D. THE PACIFIC MOUNTAINS AND VALLEYS:—A LAND WHICH IN ITS NORTHERN REACHES IS MADE UP OF MAGNIFICENT GLACIER-COVERED MOUNTAIN RANGES AND BORDERED BY A COAST OF PICTURESQUE FIORDS ALIVE WITH FISH, WHILE ITS SOUTHERN PART IS CHAR-

ACTERIZED BY BEAUTIFUL VALLEYS IN THE GENIAL CLIMATE OF WHICH THRIVES ALMOST EVERY FRUIT THAT ONE COULD DESIRE.

What is the position and extent of the region we are about to study?

Into what two natural regions can we divide the coastal border?

1. A northern division of mountains, deep bays and a cold wet climate.

2. A southern division of mountains and valleys, few bays and a warm and in most places dry climate.

How is it that the coast and adjoining valleys have a climate so much milder than the Atlantic Coast in the same latitude?

What is the reason for the great difference of climate between the coast and the country lying only a few miles in the interior?

1. In the North the interior is very high. There are few valleys.

2. In the South mountains also border the coast but behind them there are broad lowland valleys where the summers are hot.

Why is it that there is such a great difference in the rainfall between the northern and southern portions?

1. Most of the storms originate in the North Pacific and move southeasterly over the land.

2. As many storms pass east before reaching the southern portion of the region (California) that part has less rain.

How is it that the rainfall changes so greatly from the coast toward the interior?

1. Where the coast region is low and the interior is high the interior receives the most rain.

2. Where mountains border the coast they cut off much of the rain from the interior.

In what respects are the Alaskan Mountains very interesting?

1. The Alaskan Ranges contain the highest peaks in North America.

2. There are many active volcanoes.

3. The mountains are covered with glaciers.

How can we explain the many fiord bays on the northern coast and the scarcity of bays of any kind upon the southern coast?

1. The mountains of the north coast are much the higher, and the canon-valleys between them deeper.

2. The northern coast has sunken much more than the southern and therefore its bays are numerous and of a fiord character.

A broken coast is favorable to ocean commerce but what can we say of the influence of high and rugged mountains back of a coast as in the case of the northern part of the region we are studying?

Have the rivers of the Pacific Coast been of much assistance in its development?

Why is it that the Pacific Coast remained sparsely settled for a long time after its discovery?

What advantage is it that the most mountainous portion of the region we are studying is in the North and the most of the valleys in the South?

In what respects are the occupations now carried on very different from those of the early settlers?

In what respects do the Pacific forests differ from those along the East coast?

How can we account for the great size of the trees in the Pacific forests?

For many years it was supposed there was little fuel

but wood upon the Pacific Coast and manufacturing was delayed. What is the situation now?

1. Vast deposits of petroleum have been found in the southern part of the region.

2. Extensive beds of coal are now being opened by the government in the far northern Alaskan region.

What is the reason the series of valleys south of Puget Sound and east of the Coast Ranges are agriculturally so important?

How can we account for the great variety of fruits grown in the valleys of the southern part of the district we are studying?

What occupations were carried on in the Pacific Mountains and Valleys before the discovery of gold?

What important steps mark the growth of industries in the valleys of the Pacific Slope beginning with the discovery of gold?

1. Gold mining.
2. Stock raising.
3. The growing of grain.
4. Small carefully cultivated fruit farms.

What things did the Spaniards take into account in locating the missions?

What are the particular advantages of San Francisco for both domestic and foreign trade?

What rivals has San Francisco upon the shores of the Great Bay?

Why is it that although the city of Los Angeles is apparently not well situated for trade and manufacturing that it has become the rival of San Francisco in population?

What are the relative advantages of San Diego Bay, San Francisco Bay, Portland Harbor, and Puget Sound as sites for commercial cities?

What disadvantages as well as advantages are possessed by Port Simpson compared with Vancouver?

What other causes besides opportunities for foreign trade have determined the location of the cities of the Pacific Coast Region?

1. Navigable streams—Sacramento and Portland.
2. Mining.
3. Rich agricultural districts as Salem, Fresno and Los Angeles in part.

What has made the southern part of the coast region so famed as a summer and winter resort?

What has made the north coast so much visited in summer in spite of its disagreeable climate?

SPECIAL PROBLEMS OF THE PACIFIC MOUNTAINS AND VALLEYS

Why is it that to the early navigators who sailed along the Pacific Coast the country appeared to be made up almost entirely of mountains?

What is the reason San Francisco Bay was not discovered from the ocean as we would expect but was first seen by a land expedition?

What would have been the effect upon the agricultural importance of the valleys behind the Coast Ranges if the much higher Sierra-Cascade Range rose next to the ocean instead of far inland?

Are the dry summers and wet winters an advantage or disadvantage to agriculture in the Pacific Valleys?

What would have been the condition of the fruit industry in California, Oregon and Washington if there had been no available routes for railroads across the continent?

Why is it there are so many islands off the northern coast and so few off the southern coast?

How can we explain the fact that bones of extinct animals that once inhabited the mainland are found on Santa Rosa Island off the California coast?

Why is it that the coast of Alaska has proved to be such a valuable fishing ground?

Could we ask Nature to arrange the mountains and valleys of the Pacific Slope any better for our use than She has? Take into account the mining and forest resources as well as the needs of agriculture and commerce.

Why have the Columbia and Sacramento rivers built no deltas out into the ocean?

What advantages were possessed by San Francisco as a gateway to the mines during the gold excitement?

Is there any city so situated as to make it likely that it will outstrip San Francisco in size, commerce and manufactures?

TROPICAL NORTH AMERICA

THOSE FAR SOUTHERN LANDS WHERE IT IS ALWAYS SUMMER

INTRODUCTION

About what sea are grouped the lands of tropical North America?

Of what two unlike parts does this region consist?

1. Southern Mexico and Central America.
2. The West Indies.

Why have these tropical lands, although among the earliest known portions of America, developed so slowly?

1. The climate is hot and the coast lands often sickly.

2. The inhabitants are largely a mixed race without a great deal of energy.

A. CENTRAL AMERICA:—THE FERTILE LAND-BRIDGE CONNECTING NORTH AND SOUTH AMERICA.

What leads us to believe there has not always been a land bridge?

1. There are many volcanoes and earthquakes are frequent.

2. The shore line appears to have changed its position.

3. The fish on the opposite shores are closely related.

How serious an obstacle to commerce is the present land bridge?

By what means has freight been carried across the Isthmus?

1. In the early days mules were employed.

2. The Panama Railroad was in use many years.

3. With the digging of the Panama Canal great ships pass the Isthmus without unloading their cargoes.

What other route is there by which a canal might be made across Central America?

Why is it the harbors upon the Atlantic side are poorer than those upon the Pacific?

1. The sinking of the broad lowland on the Atlantic (Caribbean Sea) side made shallow harbors. (Compare with Atlantic Coastal Plain.)

2. The sinking of the steeper lands upon the Pacific gave deeper harbors.

Why is it that although the coast lowlands are very fertile they are thinly inhabited?

1. The coast is bordered by a dense forest jungle.

2. The hot moist lowlands are unhealthful for both natives and foreigners.

How has our government shown by its methods upon the Isthmus of Panama that white people can be healthful in the tropics?

Why is it the lowlands along the Pacific enjoy a more healthful climate than those along the Caribbean Sea?

(For answer find out about the rainfall.)

Why should we expect to find in Central America a remarkable variety of plants, animals and productions?

1. There is a great difference in rainfall between the Caribbean coast and the Pacific coast.

2. The interior is high and mountain peaks rise to 11,000 and 13,000 feet.

What reason have we for believing that semi-civilized people, of a different race from the present Indians, once occupied Central America?

What exceptional commercial advantages are possessed by Central America?

Why is it that the interior receives so much more rainfall and is more highly cultivated than is the Plateau of Mexico?

What exports should we expect from the tropical lowlands?

What is the cause of the small import trade? What does it tell us about the condition of the people?

How can we account for the fact that nearly all the cities and towns lie in the interior?

What productions requiring less heat than the lowlands should we expect to find in the lofty valleys of the interior?

Why is it that Central America, though possessing rich resources, still remains in a very backward condition?

1. The lowlands possess an unhealthy climate.

2. The poor shallow harbors and dense jungles of the Caribbean Coast have not favored settlement.

3. The larger part of the people are indolent and not progressive.

What is needed in order that this region with its varied resources may become rich and prosperous?

1. Improved harbors.
2. More stable governments.
3. Roads and railroads.
4. Better education.
5. Greater knowledge of sanitary and health rules.

B. THE WEST INDIES:—THE ISLAND BRIDGE CONNECTING NORTH AND SOUTH AMERICA:—THAT RICH AND BEAUTIFUL ISLAND PARADISE DISCOVERED BY COLUMBUS.

What resemblance have the West Indies to the islands Columbus supposed them to be?

Into what groups do the Islands naturally fall?

1. The Bahamas:—A group of small coral islands lying southeast of the Florida Peninsula.

2. The Greater Antilles—including Cuba, Porto Rico, Hayti and Jamaica.

3. The Lesser Antilles—The string of small islands forming the curved bridge connecting the Greater Antilles with South America.

How is it that we find among these islands such great differences in surface and climate?

1. Some of the islands are of low coral formation, others volcanic.

2. The northeast trade winds bring rain in summer to all the islands, while the northern ones are dry in winter when the trade wind belt moves toward the south.

What leads us to think that these islands may once have formed a land bridge between Florida and South America?

1. The water between most of the islands is shallow while the Gulf of Mexico and the Caribbean Sea are very deep.

2. The islands appear to have changed their level; some have sunken, others such as the Bahama Islands appear to have risen.

Why do we call these islands "a paradise?"

1. On account of their beauty.

2. On account of their richness.

In spite of their beauty and richness these islands possess serious drawbacks.

1. The climate is hot and in most parts moist.

2. There are occasional tropic hurricanes.

3. Upon some of the islands, as Martinique for example, there are active volcanoes.

How came the West Indies to be divided up among many nations?

How should we expect the productions of these islands to compare with those of Central America?

How do the islands compare with Central America as regards their culture and civilization?

What great importance does the position of these islands give them?

What can we learn from the fact that the important cities are on the coasts?

SPECIAL PROBLEMS OF TROPICAL NORTH AMERICA

Why is it that the estuaries upon the Caribbean shore of Central America although they extend farther

into the land than those upon the Pacific are much shallower?

Which was to be more feared in the days of the gold excitement in California, a journey across the Isthmus of Panama or a voyage around South America? Discuss in regard to climate, health and storms.

If you were going to Central America to live and planned to grow either sugar or bananas for the New York market which would enable you to make your home in the most healthful and pleasant surroundings?

What are the relative advantages for a ship canal of the Isthmuses of Panama and Tehuantepec?

Why were there fewer negroes imported into Central America than into the West India Islands?

How came the island of Hayti to be given over almost wholly to negroes?

Give all your reasons for choosing winter for a pleasure trip to the West Indies?

Why are all the cities, including those of the earthquake belt of Central America, built largely of stone or adobe bricks which are easily thrown down, while wood is abundant and much safer?

Why is there no travel over the land bridge between North and South America?

What was the object of the United States in purchasing the Danish West Indies? Are they of much value agriculturally? Do they possess any minerals?

SECTION V

THE COUNTRIES AND STATES OF NORTH AMERICA

THE UNITED STATES

THAT COUNTRY WHICH THROUGH THE ENERGY OF ITS PEOPLE, THE ADVANTAGES OF ITS SITUATION AND THE RICHNESS OF ITS NATURAL RESOURCES HAS BECOME THE GIANT POWER OF THE NEW WORLD.

A. Expansion of the United States.

Does the map of North America of 1755, showing the parts controlled by different nations, suggest at all that there might ever be a great English speaking people occupying the heart of the continent?

What was the extent of the United States when at the close of the Revolutionary war it became an independent nation?

How did the Treaty of 1783 leave the new nation at a disadvantage as regards the mouth of the Mississippi River?

In what way did the United States come to have an interest in "the Oregon Territory."

What are the reasons the Spanish never took actual possession of all the Region once known as California?

What was the object of the Expedition of Lewis and Clark?

How did the United States come to acquire California?

Is it any loss to the United States that the mouth of the Colorado River still remains in Mexican Territory?

Has the fact that the natural trade route outlet of the Great Lakes Region lies in Canada affected in any way the part of the United States adjoining?

Why was it at first believed that the purchase of Alaska was a mistake?

What advantage is it to the United States to hold islands near the Panama Canal?

What advantage is it to hold islands in the Pacific Ocean?

B. Situation and boundaries of the United States.

1. The United States, except for the outlying possessions, lies wholly within the Temperate belt.

2. The United States extends across the continent from east to west and thus faces on two oceans.

3. All the boundaries except a part of the Canadian and a part of the Mexican are natural boundaries.

4. The United States has a compact and regular shape.

C. How is it that the United States has grown in so short a time into one of the greatest nations of the earth?

1. The people of the United States.
   a. People have flocked to the United States from all parts of the world because of the advantages the country offered.
   b. The people of the United States are formed by the union of many nationalities.
   c. The people of the United States possess an energetic disposition.
   d. The people of the United States enjoy a democratic government and good educational advantages.
2. The natural resources of the United States.
   a. The country has a great extent of coast line with good harbors.
   b. The country has a vast area of fertile land.

c. The climate is suited to a great variety of products.
d. The country has uncounted mineral treasures.
e. The country was originally covered in large part by valuable forests.

3. Advantages of the United States for trade and commerce.
a. The United States is accessible by water from nearly all sides.
b. The interior has many navigable waterways.

4. The United States has a healthful climate.

5. The situation and climate of the United States is superior to that of any other country of North America.

D. What disadvantages are possessed by the United States?

1. Highlands lie near the eastern and western borders of the country so that the waterways opening into these oceans are navigable for only a short distance.

2. The highlands interfere also with easy access to the interior from both the east and west.

3. The greatest river system opens to the south not in the direction in which lies most of the trade.

4. The outlet of the Great Lakes lies in Canada and is closed by ice a part of the year.

E. What influences have made the distribution of the people so unequal?

1. The eastern portion has the densest population.
a. This region was settled first.
b. This region is nearest Europe from which most of the emigrants come.
c. A portion of this region has rich farming lands.
d. Conditions were favorable to early development of manufacturing.
e. Conditions favored the growth of commerce.

2. The Ohio and Mississippi Valleys stand next to the Atlantic Coast in density of population.
   a. These valleys contain a vast area of rich and easily cultivated land.
   b. Large quantities of coal and iron are available at low cost.
   c. There are many navigable waterways.
3. Mountain uplands still remain sparsely settled.
   a. These regions contain relatively small areas of good farm land.
   b. It is difficult building roads and railroads into these regions.
4. The great plains and deserts have been settled very slowly.
   a. The lack of sufficient rainfall has prevented farming.
   b. The occupations suited to these dry lands call for but few inhabitants.
5. The Pacific slope has settled rapidly.
   a. This region contains rich deposits of the precious metals.
   b. The climate is suited to the growth of a variety of fruits and other farm products.
   c. The region offers great advantages for trade with the countries bordering the Pacific Ocean.

F. How has climate affected the distribution of people?

1. Regions of moderate rainfall were settled up rapidly.
   a. There were no forests to be cleared.
   b. Rainfall was sufficient for farming.
2. Regions of heavy rainfall were settled more slowly.
   a. Forests had to be cleared.
   b. Swampy lands had to be drained.
3. The extreme cold of the north was unfavorable to settlement.

4. The extreme dryness of the southwest was unfavorable to settlement.

5. The extreme heat and moisture of the gulf lowlands were unfavorable to settlement.

G. What can we learn from the forest and rainfall maps as to the probable distribution of people?

H. What can we learn from the relief map as to the probable distribution of people?

I. In how far does the climate of the United States depend upon its Latitude?

1. The climate of the United States is determined partly by latitude.

2. The effect of latitude on the climate is not as great as we would expect it to be.

   a. The Cordilleran Highlands have a great influence upon the climate of the interior.
   b. The great elevation of large areas has an important influence on the climate of those areas.
   c. The direction of the prevailing winds modifies the climate.
   d. The distance of the interior parts from the ocean affects their climate.

J. How have the surface features directed the paths of emigration and settlement?

1. The Appalachian Highlands stood in the way of travel westward from the Atlantic Coast.

2. Mountain passes made it possible to cross lofty barriers.

3. The direction of the rivers of the interior was not such that they were of very great aid to emigrants.

4. The western mountains, though very lofty, possess important passes.

a. The route of the main emigrant trail and the first railroad to California.

b. The Santa Fe Trail and the second overland railroad.

c. The northern routes.

5. The direction of the Mississippi River has delayed its becoming an important commercial highway.

6. Nearly all the cities have grown up at points favorable to trade and manufacturing.

K. What can we say of the importance of manufacturing during the early days of the Union?

L. How is it that the newer parts of the country still produce few manufactured articles?

1. The first business of settlers in new lands is the development of the natural resources.

2. Successful manufacturing demands many conveniences not found in new regions.

M. To what degree does the United States now produce the manufactured articles it needs?

N. What determines the relative importance of the trade of the United States with different countries?

THE UNITED STATES BY GROUPS

INTRODUCTION

THE UNITED STATES:—AT ITS FOUNDING A SMALL COUNTRY MADE UP OF THE UNION OF THIRTEEN INDEPENDENT COLONIES, BUT NOW BECOME A MIGHTY NATION OF FORTY-EIGHT STATES BESIDES DISTANT TERRITORIES.

In what way have the new states been added to the Union?

1. By purchase as in the case of Florida.
2. By annexation as in the case of Texas.
3. By treaty as in the case of California, Arizona and New Mexico.

In how far have the boundaries of the states been determined by natural features?

What is the best order in which to study the states?

1. It is best to learn something about the home state first.
2. Using a history basis we should next begin with the Atlantic Coast States and in a broad way take up the others in the order of their settlement.

What are the advantages of studying the states by groups instead of singly?

THE ATLANTIC COAST STATES:—NORTHERN DIVISION

THE NEW ENGLAND STATES

MAP STUDIES

Find the position of the New England States on the map?

What states are included in this group?

What does the map tell us as to the nature of the surface?

In what direction is the longer slope?

In what way has the long slope to the south favored settlement and development?

What would you judge from the map to be the character of the streams?

What river runs almost entirely across New England?

What does the map say as to the lakes of New England?

Which of the New England States lies partly in the Great Appalachian Valley?

What does the map say as to the nature of the coast?

What dangerous shore lies between New York and Boston?

How does the direction of the mountains make it difficult to enter Massachusetts and Vermont from New York?

What does the map indicate might be the easiest means of travel in the northern part?

Point out one well defined range of mountains.

What is the nature of the mountains of Maine?

In what part do we find the most extensive lowlands?

Do the lowlands appear to be of the same nature as those of the South Atlantic States?

How do the mountains appear to differ from the Appalachians to the south?

Which of these states is without any high hills or mountains?

Which state appears to be almost wholly mountainous?

Which state appears to have the largest area of lowland?

What part of Maine would you judge to be most suited to farming?

Does the map tell us why Maine is sometimes called the "State of a Hundred Harbors?"

What mountains of New Hampshire are widely noted for their scenery?

Which state seems to possess the poorest facilities for foreign trade?

From the nature of the surface and the coast where would you look for the most of the cities?

Judging from the latitude and the surface what would you think might be the conditions of farming in New England?

From the nature of the surface and the distribution of the people would you expect much trade to be carried on directly with Canada?

What waterway on the western border offers easy communication with Canada?

Does the map give any clue as to whether Northern New England is thinly or thickly settled?

SPECIAL PROBLEMS

What part of the New England Region is included within the New England States?

How is it that the New England States though covering a relatively small area possess so great importance?

How does the position of the New England States add to their importance?

What distinguishes the New England States from most of the other states?

1. The relative importance of commerce, manufacturing and fishing.

2. The lack of coal and raw products.

3. The relatively small area of highly productive farm lands.

How is it that the New England States come the nearest of any group that we shall study to forming a "Natural Region?"

1. The larger part of the surface of New England States is a rocky upland unsuited to farming.

2. All the states but one have mountains rising from the upland.

3. All have rapid streams favorable to manufacturing.

4. All lie upon the ocean or are connected with the ocean by navigable waterways.

5. All but one possess ocean harbors favorable to commerce.

6. All were once covered with valuable forests.

7. All contain quarries of building stone.

8. None of these states contain coal or petroleum.

REVIEW

To what different causes is due the climate of New England?

What conditions made the settlement of the New England States a difficult matter?

What was the effect upon the farming industry of the great ice sheet which once covered the region?

What effect did the ancient ice sheet have upon the drainage?

Of what use are the many glacial lakes?

What advantages are afforded by the rough rocky coast with its many bays?

What advantages as well as disadvantages were offered by the forests which once covered the region?

To what extent is mining carried on?

What has led to the great development of manufacturing?

What led to the early growth of shipbuilding and commerce?

What things have governed the relative density of the population?

Why did many of the original dwellers upon the uplands abandon their farms and move to the West?

What causes in recent years have led many emigrants from Canada and Europe to settle in New England?

What effect did the growth of great cities have upon farming, upon lumbering, upon quarrying, upon fishing, upon dairying, upon the importance of summer resorts?

How do the methods of stock raising differ from those of the far West?

If cut off from a foreign sugar supply upon what could the people partly depend?

How is it that Vermont though so far from the larger cities has such an important quarrying industry?

How is it that New England factories though so far from most raw materials as well as fuel are nevertheless so prosperous?

Where does New England get the most of her materials for manufacturing purposes?

To what countries do the products of the factories go?

What great advantages has New England for shipping her products as compared with many other parts of the Union?

In how far do the people of New England now fail to raise their food?

From what parts of the United States do they import foods and why?

How is it that we prize the forests so much more today than during the Colonial Period?

What interest attaches to some of the mountains of New England?

Describe the great contrasts in surface and industries between Vermont and Rhode Island.

How is it that the life of New England fishermen is so hazardous?

How is Boston at a disadvantage compared with New York as an outlet for western produce?

Why has Portland an advantage over Montreal as a winter shipping point?

To what four different causes can we attribute the growth of the cities?

By what routes and from where is most of the coal brought to New England?

What are four of the chief manufactured products?

TOPICS FOR ORAL DISCUSSION OR FOR WRITTEN REPORTS

1. The work of making a home in the New England wilderness 200 years ago.

2. The reasons for the development of a great fishing industry in New England coast waters.

3. The harm which results from entirely cutting off the forests.

4. What the great glacier did to the surface of New England.

5. The signs by which we are able to tell that a great sheet of ice once covered New England.

6. The advantages of Maine for a summer outing.

7. The reasons why New England does not raise all the food needed.

8. The reasons why there are many abandoned New England farms.

9. Why most of the cities are situated on the ocean or navigable rivers.

10. Why the interior still remains so thinly settled.

11. How the great cities help the farmer.

12. The White Mountain National Forest.

13. The life of the backwoodsman.

14. Why New England has become a great manufacturing region.

ATLANTIC COAST STATES—MIDDLE DIVISION (NEW YORK, PENNSYLVANIA, VIRGINIA, WEST VIRGINIA, DELAWARE AND MARYLAND)

A REGION FAMED FOR THE RICHNESS OF ITS NATURAL RESOURCES:—FOR ITS PRODUCTIVE FARM LANDS, MANUFACTURES, COMMERCE, AND THE CAPITOL AS WELL AS LARGEST CITY OF THE UNION.

MAP STUDIES

What states do we include in the group of Middle Atlantic States?

What is the situation of the Middle Atlantic States?

In what direction do the highlands extend through these states?

Point out upon the map the six different natural regions which extend across the Middle States.

1. The Atlantic Coastal Plain.
2. The Piedmont region.
3. The Appalachian mountains or ridges.
4. The Great Appalachian Valley.
5. The Alleghany Plateau or Mountains.
6. The Region of the Great Lakes.

What two chief land slopes do we find here?

In what three different directions do the rivers flow?

What does the map indicate is the nature of the Appalachian Mountains?

Is there anything unusual in the behavior of the Potomac, Susquehanna and Delaware Rivers?

If you wanted to cross the highlands what route would you take?

In what way do the Catskill Mountains resemble an island?

Point out the mountains most noted as a summer camp ground.

How does the coast line differ from that of New England?

How does the coastal plain compare with that of New England?

How do the bays differ from those of New England?

How is it that the map shows so few lakes?

Which state has the coldest climate?

Which state is practically all lowland?

Which one is mostly highland?

Are any of these states without ocean outlets for commerce?

Which states have the best facilities for foreign trade?

Explain from the map the advantages of New York over Philadelphia for trade with the West.

Where do we find the most of the cities?

SPECIAL PROBLEMS

What does the diversity of surface of the Middle States lead us to expect as to their variety of natural resources?

How does the surface of this region compare with that of the New England States?

1. The soil as a whole is less rocky and more productive.
2. There is a large area of lowland.
3. Navigable waterways are of greater extent and importance.
4. The surface in many parts favors the building of canals.

In what way does the position of these states favor their great commercial development?

What conditions favored the early settlement of this region?

1. Large areas of farm land.
2. Tidal streams navigable far into the interior.
3. The Mohawk Valley leading west to the Great Lakes.

What conditions have led to the present importance of agriculture?

1. Large areas of fertile land.
2. Variety of climatic conditions.
3. Accessibility to the markets of large cities.

How is it that the lowlands bordering Lakes Erie and

Ontario form one of the most important fruit districts in the United States?

If you lived upon the rolling uplands of any of these states what are two occupations you might engage in to advantage?

If you lived upon the coastal plain of New Jersey, Delaware, Maryland or Virginia, what sort of agriculture would you likely engage in?

Why are tobacco, corn and peanuts especially characteristic of the farms of Virginia?

What exceptional commercial advantages are possessed by the state of New York?

How is it that in none of these states is water depended upon for power in manufacturing as in New England?

What exceptional advantages for manufacturing are possessed by Pennsylvania and West Virginia?

Why does Virginia carry on much less manufacturing than the states to the north?

Owing to the absence of lakes from the mountains of all these states except New York what do you think of the danger of serious floods in the rivers as compared with the rivers of New England?

What has a city population of many millions of people had to do with the growth of innumerable summer resorts?

To what sorts of places do people go to spend their vacations?

1. The seashore attracts many.
2. The primitive mountains attract others.
3. Many go to country homes.

How is it that many people working in the great cities can make their homes many miles out in the country?

REVIEW

Describe the different divisions of the Appalachian Mountains and tell which offered the greatest barrier to emigration.

What is there particularly remarkable about the Great Appalachian Valley?

Describe the different routes by which the Appalachian Highlands were crossed?

Describe the great commercial route between New York City and Lake Erie.

The Erie Canal would have been much shorter if it had been built to Lake Ontario instead of Lake Erie. Why was this not done?

Why was the great canal nearly completed between Philadelphia and Pittsburgh finally abandoned?

What is the meaning of the word "Water-gap" as applied to the Susquehanna and Delaware Rivers?

How can we explain the absence of lakes south of New York?

In what part do we find the highest and most attractive mountains?

In what parts of these states is lumbering still an important industry?

What is the chief industry that would be injured if the land should sink enough for the ocean to cover the coastal plain?

What is meant by the "Fall Line?"

What part has the Fall Line played in the development of the coastal region?

What bay affords the best conditions for successful oyster farming?

Explain how it is that petroleum and coal have no relation to each other.

What are the reasons for turning the Catskill Mountains into a state park?

Why are the soils more productive than those of New England?

What is the influence of the great variety of climates on the agricultural productions?

Why is water power generally less used for manufacturing than in New England?

What can we say of the use to which Niagara Falls has been put?

What is the influence of the great cities upon the sort of farming carried on?

Explain why peaches form an important crop on the Atlantic Lowlands, grapes upon the Lake Plains, while neither can be raised to advantage in the intermediate region.

Why has the iron and steel industry become so important in Pennsylvania?

Why is dairying more extensively carried on than the raising of wheat?

Why are the canals of less importance than they were once?

What are the most important products shipped east through the Erie Canal?

What fruits are raised in large quantities in the highlands?

Why do the bays extend farther into the land than do those of New England?

Why are the great cities of the Chesapeake Bay located far up the bay rather than near its mouth?

In what two agricultural industries does New York excel the other states?

Why was the city of Washington located where it is?

How do the industries of the cities along the Fall Line

compare with those of the cities in Western Pennsylvania and West Virginia?

Why does the position of the city of Baltimore make it better suited for exporting western products than Philadelphia?

Why is New York City known as the "Gateway of the Union?"

Over what shores does the city of New York now extend as compared with its original location?

How is it that Albany although advantageously situated has been so far outstripped by New York?

How can we account for the many large cities scattered along the Erie Canal?

Why is Buffalo called the "Queen City of the Lakes?"

What different commercial outlets has Pittsburgh?

What are the particular advantages in the situation of Pittsburgh?

TOPICS FOR ORAL DISCUSSION OR FOR WRITTEN REPORTS

The difficulty the early emigrants had in crossing the Appalachian Highlands to the Ohio Valley.

How the Alleghany Mountains for a long time separated the French and English settlements.

The different routes by which emigrants finally crossed the Appalachians.

The story of Niagara Falls.

How Pennsylvania came to have coal, petroleum, and iron.

The story of Pittsburgh.

Fishing and oyster farming in Chesapeake Bay.

Life in the Dismal Swamp, Virginia.

The sand dunes and beaches of New Jersey.

The scenery of the Hudson.
Life in the Adirondack Mountains.
The importance of the Erie Canal.
How New York City gets its daily food supply.
The advantages and disadvantages of life in a city.
The story of Philadelphia.
Life upon a tobacco plantation.

ATLANTIC COAST STATES—SOUTHERN DIVISION (NORTH CAROLINA, SOUTH CAROLINA, GEORGIA AND FLORIDA)

THE LAND WHERE PONCE DE LEON SOUGHT THE FOUNTAIN OF YOUTH AND IN WHICH WAS MADE THE FIRST PERMANENT SETTLEMENT IN THE UNITED STATES:—A REGION REACHING FROM TROPICAL SHORES THROUGH VAST LOWLANDS TO THE LOFTIEST PEAKS OF THE APPALACHIAN MOUNTAINS:—WHERE THE MANY KINDS OF CLIMATE, SOILS AND SLOPES FAVOR THE DEVELOPMENT OF A GREAT AND PROSPEROUS FARMING POPULATION.

MAP STUDIES

What are the states we now take up and where are they situated?
What three natural regions extend across these states?
Through what other states to the north do these same natural regions extend?
Judging from the surface how should farming compare in importance with the states to the north?
What different names are given to different parts of the Appalachian Mountains in North Carolina?

In how far can we compare the chief drainage of these states to a roof with only one slope?

How do the streams compare with those of the Middle States and of New England?

What does the map say as to the relative extent of the lowlands?

Which state consists entirely of lowlands?

From the extent of the lowlands what can we say as to the probable importance of farming?

How does the coast compare with that of the four states to the north?

What peculiarities does the whole coast south of New York present?

Compare Albemarle and Tampico Sounds and state the differences.

How can we explain the absence of large cities on the sounds of North Carolina while there are many upon Chesapeake Bay?

Compare the coast line and the distribution of the cities with the coasts and cities of New England.

What portion of this region appears to be most thickly settled and why?

What are the obstacles to shipping Western products from the ports of these states?

What are the relative advantages of Florida as regards extent of coast line?

What does the map suggest is the reason that Southern Florida, though not quite in the tropics raises tropical fruits?

How can we explain the presence of many lakes in Florida?

What does the map suggest as to the relative importance of latitude, elevation and bodies of water in determining the climate of these states?

SPECIAL PROBLEMS

What difficulties did the Spanish encounter in exploring Florida?

How did the nature of the country enable the Indians to make trouble for many years?

Why was there little emigration from these states into the Ohio and Mississippi Valleys?

Why is the Piedmont Belt the most thickly settled part of these states?

Compare life conditions upon the lower part of the coastal plain and in the mountains with life in the Piedmont region.

What is being done to make life more pleasant and healthful in the coastal belt?

How do the different climates, soils, and slopes affect the distribution of the various agricultural products?

1. Southern Florida produces tropical fruit.
2. Central Florida semi-tropical fruits.
3. The marshy coastal plain favors the growing of rice.
4. The drier lands are adapted to cotton, corn, etc.
5. The sandy portions of the coastal plain are covered with pine forests.
6. The higher slopes of the Appalachians are suited to temperate fruits.

Why is agriculture likely to remain the leading industry?

If you wished to engage in manufacturing in what part of this region would you locate?

Why is it that manufacturing has not become important here as in New England?

REVIEW

Comparing the shore with New England what would you judge would be the depth of the water in most of the bays and inlets?

What effect have the shallow waters had upon foreign commerce?

How do the lagoons behind the barrier beaches favor coastal trade?

What effect has the Fall Line had on the position of the cities?

How can we account for the very irregular distribution of the people?

How is it that Savannah and Charleston have grown up on the coast instead of at the Fall Line?

Explain in a general way the distribution of the different forest trees.

How is it that these states still contain large areas of forests while in the north the forests are nearly gone?

How is it that we find poor and unprofitable farms in many parts of the hill lands?

1. No care has been taken to prevent the soil from washing.

2. No fertilizers have been applied to the worn out lands.

What can we do to restore the soils of the mountain slopes?

What has been the effect upon the valleys of careless use of the mountain slopes?

What has been the effect of inaccessibility upon the people of the mountain districts?

How is it that in the early days the mountains were dreaded while now they are being sought?

What branches of farming have been developed as a result of the needs of the northern cities?

What has been the effect of the introduction of negroes on the development of this region?

How can we account for the greater density of the negro population in the lowlands than in the highlands?

What other region competes with these states in the shipment of winter vegetables?

In what lies the great attractiveness of Florida as a winter resort?

Describe the nature of the Florida Keys.

Why has Atlanta with apparently few advantages become the great commercial centre of this region?

Why are the fruits of Southern Florida never injured by frost while in Central Florida they are sometimes frozen?

Why are the pine forests used more for production of naval stores than for lumber?

Why is there less off-shore fishing than off the New England Coast?

TOPICS FOR GENERAL DISCUSSION OR FOR WRITTEN REPORTS

The life of the "Mountain People."

Scenes along a Florida river.

A trip into the Everglades.

The Florida Keys.

An old-time plantation.

The growing of rice.

Sea-island cotton.

What is making the South prosperous?

Orange growing in Florida compared with California.

Why the foreign trade of the South Atlantic States is small compared with that of the New England States.

Mt. Mitchell—the highest peak of the Appalachian mountains.

Cape Hatteras and the sounds behind it.

THE SOUTHERN STATES—CENTRAL DIVISION (ALABAMA, MISSISSIPPI, KENTUCKY, AND TENNESSEE)

A REGION OF GREAT NATURAL RESOURCES AS YET ONLY PARTLY DEVELOPED:—A REGION WHICH BECAUSE OF ITS VAST FERTILE LANDS AND FAVORABLE CLIMATE MUST ALWAYS REMAIN NOTED CHIEFLY FOR ITS AGRICULTURE, YET, OWING TO THE PRESENCE OF IRON AND COAL IS BECOMING THE MOST IMPORTANT MANUFACTURING DISTRICT OF THE SOUTH.

MAP STUDIES

What four states do we include in the Central Division of the Southern States?

Describe their position.

Over what different natural regions do these states extend?

Why do we group together states having such diverse characters?

Which one is practically all lowland?

What position do these states occupy with respect to the Appalachian Highlands?

Across which ones does the Cumberland Plateau extend?

If one had to travel from East Tennessee to West Tennessee without leaving the state what difficulties would he encounter?

If you had goods to ship from Knoxville by what routes could you get them to New York?

Through what gap in the Cumberland Plateau did the early settlers reach Kentucky?

What river affords transportation to the gulf from three of these states?

What other navigable rivers are there?

What river navigable to Knoxville flows through three states and touches the fourth?

Which states have the best outlet on the ocean?

What does the nature of the surface tell us as to the importance of agriculture?

Explain the peculiar character of the Yazoo River?

Where do we find most of the cities?

SPECIAL PROBLEMS

What parts of these states were first settled?

In what important ways do the two northern states of the group differ from the two southern?

In how far do Alabama and Mississippi resemble the states lying to the east and to the west?

1. Climate of all is similar.
2. The soils are similar.
3. The same forest belt is found in all.
4. The productions are similar.
5. All have a dense negro population.

Into what three belts with different life conditions can we divide these states?

1. The mountain belt, with rather poor soil and difficult of access.

2. The middle or upland belt with a pleasant climate and fertile soil.

3. The coast lowlands.

Which state belongs almost wholly in the lowlands?

To what sort of farming is the soil and climate of Kentucky best adapted?

How can we explain the origin of the wonderful caves of Kentucky?

What reason can we give for the small negro population on the uplands of Tennessee and Kentucky?

What kind of mining is likely to become important in three of these states?

What has led to the great development of manufacturing in Northern Alabama and East Tennessee?

How have the windings of the Mississippi River upon its flood plain determined the location of Memphis and Vicksburg?

REVIEW

Explain the difference in origin between the Mississippi Flood Plain and the Coastal Plain?

Give the results of rich soil, great heat and moisture upon life conditions on the lowlands.

What has been the result of the inaccessibility of the Cumberland Plateau?

Why did the coast and river lowlands settle up slowly?

Explain the origin of the Yazoo and other bayous.

Explain the distribution of the negro population.

Explain the distribution of the forest belts.

Why is it that such a large part of the forests of Alabama and Mississippi remain uncut?

Why are the southern parts of Mississippi and Alabama less adapted to orange growing than is Florida?

Discuss under the following heads causes governing the distribution of the cities.

1. Opportunity for river trade.
2. Opportunity for ocean trade.
3. Mineral deposits.

How is it that although Alabama has a good port its largest city is far away in the interior?

Has the Fall Line determined the position of any city?

How can we explain the fact that Alabama has a good harbor while Mississippi has none?

To what is due the growing prosperity of the Gulf States?

Why is it that manufacturing did not long ago become important as in New England?

Why is farming likely to remain the leading industry?

What are the chief shipping points for cotton?

What advantages has Mobile for shipping cotton compared with cities on the Mississippi River?

TOPICS FOR ORAL DISCUSSION OR FOR WRITTEN REPORTS

The Blue Grass Region.

Daniel Boon's Wilderness Road.

Mammoth Cave.

The "Black Belt."

The wild life of the marshy lowlands and bayous.

The story of the bayous of the Mississippi River Flood Plain.

The method of protecting the Mississippi Lowlands from floods.

Home life in the Cumberland Mountains.

Advantages and disadvantages of a home in each of the three belts.

THE SOUTHERN STATES—WESTERN DIVISION (LOUISIANA, ARKANSAS, OKLAHOMA AND TEXAS)

A LAND OF GREAT CONTRASTS IN SURFACE, CLIMATE AND PRODUCTIONS:—IN PART A MOIST SUB-TROPIC LOWLAND WITH FIELDS OF RICE, SUGAR CANE AND COT-

TON:—IN PART A HILLY UPLAND WITH TEMPERATE FRUITS:—IN PART DRY PRAIRIE-PLAINS SUPPORTING CHIEFLY CATTLE AND SHEEP, AND IN PART DESERT MOUNTAINS CONTAINING MINERALS.

MAP STUDIES

What is the position and extent of the four states we are now going to study?
What can we say of their relative size?
In what different natural regions do these states lie?
Which state lies wholly in the lowlands?
Which state has the greatest variety of surfaces?
Describe the character of the Mississippi Delta.
In what way does the coast of Texas resemble that of North Carolina?
Why are there so few good harbors along the coast of Louisiana and Texas?
What highland lies partly in Arkansas?
In what region do all the larger streams rise?
What plain-like upland is in Western Texas?
What leads us to believe that the region about the mouth of the Mississippi is very wet?
What leads us to believe that Western Texas has a dry climate?
Which state does not have the advantage of navigable waters?
Find the three largest rivers.
What does the map say as to the density of the settlements in Western Texas and Oklahoma?
What appear to be the chief causes governing the location of the cities?

SPECIAL PROBLEMS

What does our heading suggest as to the climate and surface of the four states we are now studying?

How can we explain the fact that Western Texas is so dry while Louisiana is very wet?

What natural resources are possessed by this group of states?

1. The soil is productive wherever there is sufficient water.
2. The eastern half is covered with pine, cypress and hardwood forests.
3. Coal is found in all four states.
4. Oil and gas are found in all but Arkansas.
5. Sulphur and salt are found in Louisiana.

How can we divide these states according to their agricultural possibilities?

1. The Gulf Plain and river delta.
2. The hilly Ozark region.
3. The rolling prairies.
4. The dry plains.
5. The mountains.

Which of these divisions is capable of supporting the densest population?

What parts of the hill and prairie uplands is capable of supporting a dense population?

1. Those which receive sufficient rain.
2. Those where water can be obtained for irrigation if the rainfall is not sufficient.

Why have the rivers of Texas done so little delta building?

How are the uses to which the rivers in Western Texas and Oklahoma are put different from their uses in Arkansas and Louisiana?

How is it that the immediate banks of the Mississippi River are higher than the land a little back?

How is the opening of the Panama Canal likely to affect the commerce of the Gulf Ports?

What cities owe their importance chiefly to agriculture?

What cities owe their importance to commerce?

On what are the chief manufacturing industries based?

How does the cattle raising industry in Texas differ from that of the states farther east?

How is it that the Rio Grande River, though it has the largest basin of any river but the Mississippi, is not navigable?

REVIEW

How is it that the foreign commerce of New Orleans is much less than we should expect it to be?

What has been the effect of deepening the mouth of the Mississippi?

What can yet be done to greatly increase foreign commerce of New Orleans?

How do the coast features compare with those of the coasts already studied?

How can we explain the many lakes in the delta region of Louisiana?

What useful part do the Bayous play in the life of this region?

What loss do the Gulf hurricanes sometimes bring to the coast lowlands?

What are the dangers of the winter storms on the plains?

Why does much of the lowland region still remain thinly settled?

How can we explain the great differences in the climate of different parts of Texas?

How do the conditions under which rice, cotton and sugar cane grow differ from each other?

Why has Louisiana almost a monopoly in sugar cane growing?

Why is it that so little of the forest wealth has been used?

What conditions determine the western boundary of the forested region?

By what means can the dry plains be made to support a much greater population than at present?

What great advantages has New Orleans over Baton Rouge?

How is it that the climate and productions of the Ozark Plateau are so different from the lowlands around it?

How is it that steamboat travel on the Mississippi is not as great as it was many years ago?

What is there interesting about the story of Oklahoma?

TOPICS FOR ORAL DISCUSSION OR FOR WRITTEN REPORTS

The journey of La Salle.
The founding and early life of New Orleans.
Life on a cattle ranch.
The bird life of the Gulf lowlands.
Steamboating on the Mississippi.
How the Mississippi River builds its delta.
A home on the treeless plains.
The Mississippi River in season of flood.
The building of the great commercial port of Galveston.

THE NORTH CENTRAL OR GREAT LAKE STATES (OHIO, INDIANA, MICHIGAN AND WISCONSIN)

A REGION NOT ONLY CENTRALLY LOCATED AND ACCESSIBLE BY WATER FROM EVERY DIRECTION BUT ALSO POSSESSING SUCH RICH AND VARIED AGRICULTURAL, FOREST AND MINERAL RESOURCES THAT IT HAS BECOME ONE OF THE MOST THICKLY SETTLED AND IMPORTANT PARTS OF THE UNION.

MAP STUDIES

What position do the Great Lake states occupy?

What two natural regions do these states lie in?

What is the general nature of the surface:—Mountainous, hilly or flat?

Which state as a whole has the greatest elevation?

In what part is the lowest land?

What is the nature of the watershed between the Ohio and the Great Lakes?

What is the direction of slope of the greater part of Ohio, Indiana and Illinois?

Find the two principal rivers by the aid of which canals have been built, one connecting the Mississippi with Lake Michigan and the other the Ohio with Lake Erie.

Find the Fox and Wisconsin Rivers by means of which early French explorers reached the Mississippi.

Point out the different navigable waters surrounding these states and those by which their interior can be reached.

What does the presence of much water indicate as to the climate?

Where could a dam be placed to make the Great Lakes overflow into the Ohio and Mississippi Rivers?

What strait and waters divides Michigan into two parts?

Judging from the extent of navigable waters and nearly level surface of much of these states what might we conclude are the chief industries?

Where do we find most of the large cities situated?

SPECIAL PROBLEMS

What was the chief occupation of the first settlers?

By what two routes did the English settlers reach these states?

Why did they not make use of the Mississippi River?

What especial attraction did Indiana and Illinois offer the early settlers?

What value did the early settlers put upon the forests?

What two different forest belts do we find extending across these states?

1. A southern or hardwood forest.
2. A northern pine, spruce and fir forest.

How has the distribution of the forest belts affected the distribution of the wood-pulp and furniture manufacturing industries?

What can we say of the importance of the mineral deposits of Northern Michigan and Wisconsin?

In what three states do we find deposits of coal, oil and natural gas?

In what way is the distribution of fuel a fortunate one for the development of these states?

What would have been the effect on the development of this region if the position of the fuel and the iron had been reversed?

What has influenced the kind of farming carried on in these states?

1. The presence of large bodies of water making the climate more favorable to fruit growing.

2. A climate and soil well adapted to corn, wheat and oats.

3. Cheap corn and other grains have encouraged the raising of stock.

4. The needs of many great cities.

How can we explain the origin of the rich prairie soils?

REVIEW

What indicates a drier climate as we go from Ohio westward?

How is it that although the great glacier covered nearly all of these states the soil is so much better than in New England?

How is it that the original forests are nearly gone from the central and southern parts while a great deal remains in the north?

How did the surface of the country favor the building of canals from the Lakes to the Ohio River?

What has led to the abandonment of the most of the canals?

What was the route by which the earlier farmers got their produce to market and received supplies back?

What effect did the building of the Erie Canal have upon this region?

How did the early French traders avoid Niagara Falls and the Rapids in the St. Lawrence?

What has been done to enable grain to be shipped from Chicago to Europe by way of Montreal?

Why is it that Wisconsin is colder than the Lower Peninsula of Michigan?

Why is the farming population denser in the South than in the North?

What can we say of the amount of freight that passes through the "Soo" Canal?

What general difference do we find between the manufacturing industries of the northern and the southern parts of this region?

Why is Chicago important both as a lake port and as a railroad centre?

What particular advantages has Chicago as a meat packing city?

Trace the route by which iron ore from Lake Superior reaches Pittsburgh.

Why is the iron industry the chief one in the cities of Detroit, Toledo and Cleveland?

What are the climatic conditions especially favorable to growing of corn in the three southern states of this group?

What are the particular causes for the growth of Indianapolis? Of Columbus?

What are some of the causes for the growth of Cincinnati?

By what different routes could a boat from Chicago reach the ocean?

What leads us to believe that the Great Lakes once emptied south into the Mississippi River?

How do we account for the many beautiful lakes of Wisconsin?

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

Early French explorations.

An early home on the border of the prairies.

The importance of canals before the building of the railroads.

The Chicago drainage canal.

How the great glacier prepared the soil for the farmer.

Why Chicago has become so great a city.

Why most of the traveling was once carried on by means of canoes.

Why the conditions are so favorable for manufacturing iron products.

The copper mines of Lake Superior.

The advantages of the lake region for summer outings.

The advantages of Milwaukee compared with Chicago.

Coal mining compared with coal mining in the Appalachians.

Farming compared with farming in New England.

THE PRAIRIE STATES (MISSOURI, KANSAS, IOWA, NEBRASKA, MINNESOTA, NORTH AND SOUTH DAKOTA)

THOSE STATES LYING BETWEEN THE LAKE STATES AND THE ROCKY MOUNTAINS WHICH, THOUGH THEY EXTEND INTO THE FOREST BELT ON THE EAST AND THE DRY PLAINS ON THE WEST AND CONTAIN VALUABLE DEPOSITS OF COAL, IRON AND ZINC, ARE MOST WIDELY KNOWN FOR THEIR VAST FERTILE PRAIRIES WITH ALMOST LIMITLESS FIELDS OF CORN AND WHEAT.

MAP STUDIES

What are the states included in the prairie group?

What appears to be the general character of the surface?

What does the map teach us as to the position of the belt of dry plains?

What would you judge to be the more moist forest-covered portion?

What portion of this region is the highest?

Trace the navigable rivers and note if all the states of the group are reached by them.

Which state is reached through the Great Lakes?

Which states are drained by the Missouri?

Which are drained chiefly by the Mississippi?

How can we explain the multitude of lakes in Minnesota?

In what three directions and into what waters do streams from Minnesota flow?

What unusual character is shown by this watershed?

What river empties northward into Hudson Bay?

By what two routes could you go in a canoe, with a short portage, from the Mississippi River to waters emptying into Hudson Bay?

What two states contain island-like uplands rising from the prairie-plains?

What part of this region appears to be the most thinly inhabited and why?

Which state appears to have the greatest area of fertile prairies?

Which appears to be wet, forest covered and to contain the least prairie land?

Where do we find the largest cities?

SPECIAL PROBLEMS

Over what natural regions do these states extend?

What changes in climate do we encounter as we travel across them from east to west?

Why is the climate more severe than that of the Lake States?

What advantages for settlement do the prairies present?

What disadvantages are encountered upon the western plains?

What mineral discovery has made home-making easier upon the plains?

What mines in Minnesota are the most wonderful of their kind in the world?

How do we account for the greater diversity of resources of Missouri compared with other states of the group?

What conditions govern the distribution of the wheat and corn growing districts?

What has given Iowa the advantage over every other state in general farming and stock raising?

In what way do Missouri and Minnesota differ from the other states?

Over how much of this region did the Great Glacier extend?

What wonderful lake do we find in North Dakota?

Why are the floods in the Missouri so much worse as a rule than the floods in the Mississippi?

Why is it that much of Northern Minnesota is not well adapted to farming?

How can we explain the great richness of the soil of the Red River Valley?

To what sort of industry are the plains especially adapted?

How can we account for the two cities of Minneapolis and St. Paul growing up almost side by side?

REVIEW

How do the plains differ from the prairies in surface and climate?

Describe the reasons for the sudden and severe winter storms in the northern part?

Describe the cyclones occurring in the southern part.

How can we account for the dry climate of the plains?

How can we account for the moist climate of the forest belt?

Explain the causes for the distribution of lumbering, farming, mining and cattle raising in these states.

What are the causes for the growth of great milling industries at Minneapolis?

What causes have led to Duluth becoming a great shipping point?

How is it that cattle raising upon the plains is being replaced by general farming?

What has been the effect of railroads on navigation upon the Mississippi and Missouri Rivers? Why?

What is being done to overcome difficulties of summer navigation upon the Upper Mississippi River?

What is there in the situation of the cities of St. Louis and Kansas City which should make them of such great importance?

What cities early became important as starting points for the journey across the plains?

What has made possible the development of mining and lumbering in the Black Hills while all about the Hills are treeless plains given over to farming and stock raising?

How is it that we find the climate and vegetation of the Ozark Mountains different from that of the surrounding lowlands?

Describe the chief routes by which produce from the Prairie States could reach the New York market.

Why is it that every early settlement of importance was established upon some river?

Why is the raising of cattle upon the plains a more uncertain business than raising them upon a small farm in the Prairie Region?

What has been done in this treeless region to increase the fuel supply?

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

Crossing the plains.

The wild life once found on the prairies and plains.

The Great Iron Mines of Northeastern Minnesota.

The work of a tornado.

Scenes in the Lake region of Northern Minnesota.

Life on a great cattle ranch.

Making a home on the prairies.

1. Choice of a site.
2. Materials for the home.
3. Dangers.
4. Occupations.

Why the railroads took the traffic away from the rivers.

What we can do to increase the usefulness of the rivers.

The conditions needed for the growing of wheat compared with those needed for corn.

THE ROCKY MOUNTAINS AND PLATEAU STATES:—NORTHERN DIVISION (MONTANA, WYOMING AND IDAHO)

A REGION OF PLAINS AND PLATEAUS SUPPORTING GREAT HERDS OF CATTLE AND SHEEP AS WELL AS IRRIGATED FARMS AND ORCHARDS:—OF LOFTY MOUNTAINS RISING ABOVE THE HIGHLANDS, THEIR SLOPES COVERED WITH VALUABLE FORESTS:—OF RICH DEPOSITS OF GOLD AND

COPPER, AND OF THE WONDERLAND OF THE UNION-YELLOWSTONE PARK WITH ITS GEYSERS AND HOT SPRINGS.

MAP STUDIES

Find the position of the Plateau States.
Which are included in the northern group?
What can we say of the average elevation of these states?
What main group of mountains crosses them?
What gap occupied by the Union Pacific Railroad separates the Northern Rockies from the Southern?
Is there any low gap in the Rocky Mountains in the states we are now studying?
Over what three different natural regions do these states extend?
Why do we call the highland on the west a "plateau" and that on the east "plains?"
To what part do we give the name "Snake River Plains?"
What local names are given to parts of the Rocky Mountains in Montana?
What local names are given to parts of the Rocky Mountains in Wyoming?
What national park lies in Northwestern Montana?
What national park occupies the northwest corner of Wyoming?
Which state has the largest area of plains?
Which appears as a whole most elevated?
How can we account for the many lakes?
Which of these states is reached from the ocean by river boats?
Which has no large rivers?
Which lies in the Pacific drainage?

Which lies partly in the Pacific drainage and partly in the Atlantic?

Into what three bodies of water far removed from each other do the rivers of these states flow?

What canyon, rivaling the Grand Canyon of the Colorado borders the west side of Idaho?

SPECIAL PROBLEMS

What two chief kinds of surfaces do these states present?

How is it that the route opened by Lewis and Clark did not become a regular emigrant trail?

What industry has developed at the head of navigation on the Missouri?

Contrast the difficulties of travel upon the plains and in the mountains.

1. The plains were easy to travel over but away from the streams water and fuel were scarce.

2. The mountains were difficult to cross but fuel and water were abundant.

How did the Indian tribes found here compare with those in other parts?

How does the climate compare with that of the prairie states to the east?

1. The whole region is higher and colder.

2. The forests on the mountains show that the rainfall there is greater.

3. There are the same sudden and severe winter storms.

4. The winter cold is often quickly relieved by the Chinook winds.

In what way have we succeeded in saving some of the wild animals once so abundant?

How do the resources of the Columbia plateau differ from those of the plains?

Why was the Snake River of so little use to the emigrants on their way to Oregon?

What has made possible the transformation of the Snake River desert into fertile fields?

In what way do the resources of the mountains differ from those of the plains?

1. Lumbering and mining of the precious metals is the chief occupation in the mountains.

2. Farming, stock raising, and getting of coal and petroleum is the chief occupation of the plains.

What was the order followed in the development of different occupations as the country settled up?

1. Fur hunting.
2. Mining.
3. Cattle raising.
4. Farming by irrigation.

How came nearly all the railroads to be built along east and west lines?

What determined their choice of routes across the mountains?

In what way do the Yellowstone and Glacier National Parks differ?

Why has the most important city of Montana grown up where you would never look for a city?

Why have the most important cities of Wyoming grown up on the plains?

How is it that gold mining and cattle raising could be carried on successfully here before the building of the railroads?

What has the government done to aid the farmers of Wyoming?

REVIEW

What first led explorers through this region?

What was the object of the Lewis and Clark expedition?

Describe the life of the fur hunters and traders.
Describe the chief wonders of the Yellowstone Park.
Why are parts of the Columbia Plateau though lying west of the Rocky Mts. as dry as the Great Plains?
How far could farming be developed on the plains if it were not for the lofty mountains?
Why are the copper ores from the mountain mines taken to Great Falls for treatment instead of being treated where they are mined?
How far does cattle raising as carried on in the region of the plains tend to develop the country?
In how far does mining tend to permanently improve this region?
Why is it that farming by irrigation leads to more dense settlement and comfortable home conditions?
What has led to apple growing on a great scale in Idaho and Montana?
What seem to be the two chief causes deciding the location of the cities?
How do the forests of the Rocky Mountain Region differ from the Eastern forests?
How do the methods of lumbering compare with those of the East?
Why are the railroads of more importance than in the East?

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

The life of the trapper and hunter among the Indians.
The wonders of the Yellowstone Park.
Glacier National Park.
The Great Pathfinder Reservoir.
The copper mining city of Butte.

The Chinook winds.

The Grand Canyon of the Snake River.

The journey of Lewis and Clark across the Rocky Mountains.

Home on a stock range contrasted with a farm home.

The wild life of the Rocky Mountain Region.

THE ROCKY MOUNTAINS AND PLATEAU STATES:—SOUTHERN DIVISION (UTAH, COLORADO, ARIZONA AND NEW MEXICO)

A REGION OF UNRIVALED SCENERY:—PLAINS, LOFTY MOUNTAINS, HIGH PLATEAUS, MILE-DEEP CANONS, SALT LAKES AND SUB-TROPICAL DESERTS:—ONCE THE HOME OF THE CLIFF DWELLER AND THE SAVAGE APACHE, BUT NOW CLAIMED BY THE MINER, STOCKMAN AND LAST OF ALL BY THE FARMER WHO IS TURNING THE DRY PLAINS AND DESERT VALLEYS INTO BLOOMING GARDENS.

MAP STUDIES

What is the general character of the southern plateau States?

Over what natural regions do they extend?

What contrasts in elevation do we find here?

What mountain range forms the continental divide?

How does this range behave as it approaches Mexico?

In which state and in what mountain peak does it reach its greatest height?

Which state has the lowest land?

What part of this region lies in the Great Plains?

What part forms the Colorado Plateau?

Which state lies partly in the Sonora Desert?
Which lies partly in the Great Basin?
How can we account for Great Salt Lake?
What three great rivers take their rise in Colorado and flow in different directions?
Through what plateau has the Colorado River cut its great canon?
If you were going to cross the Rocky Mountains through these states what would be your easiest route?
What makes a direct journey from Phoenix to Salt Lake City impossible?
About what is the greatest height you would have to climb to cross the Rocky Mountains near the Mexican line?
In crossing the mountains near Leadville, Colorado, how high would your train take you?
How far north would you have to go to find a crossing of the Western Highlands as low as that near Mexico?

SPECIAL PROBLEMS

What have we discovered as to the life of the cliff dwellers?
What two strongly contrasted groups of Indians now occupy this region?
What first brought the Spaniards into Arizona and New Mexico?
What first brought Americans into the Southern Plateau States?
What were the two chief industries in Arizona and New Mexico for many years?
What was the importance of the Santa Fe Trail in the early life of this region?

Why was the Santa Fe Route to California little used by the pioneers?

What difficulties are there in the way of using the Grand Canyon of the Colorado as a highway?

What can we say of the other canyons of this river in the State of Colorado?

Why is there such a great range in rainfall between the low deserts of Arizona and the lofty mountains of Colorado?

What great advantage is it to the farmers along the lower Colorado that most of the precipitation in the Rocky Mountains comes as snow?

How can we account for the great range in temperature between the lowlands and the mountains?

How does the temperature affect the distribution of farming and stock raising?

What determined the location of the Spanish settlements?

How came Salt Lake City to grow up on the desert plain bordering Great Salt Lake?

Why has Denver become the greatest city of the Rocky Mountain Region?

What great irrigation system is making productive the desert valleys of Arizona?

What wonderful scenery is found in the high plateaus of Utah?

In what way did the early settlements in Utah differ from those in the surrounding territory?

REVIEW

In how far would irrigation be possible in this region if there were no high mountains?

Compare the Plateau States with each other in regard to the following points:—forests, minerals, coal,

petroleum, stock raising, farming and fruit raising.

What is the character of the productions of the semi-tropic valleys?

Describe the different zones of vegetation between the Sonora Desert and the summit of the Rocky Mountains.

What do we mean when we say that some of the mountains rise above the timber line?

What do we mean when we speak of the "dry timber line?"

How can we account for the fact that the high plateaus are largely devoted to stock raising although they have a fairly abundant rainfall?

How can we account for the decreasing importance of the great stock ranges?

How is it that in New Mexico and Southern Arizona there is such a large Mexican population?

Explain the reasons for the peculiar character of the leaves and sap of much of the desert vegetation.

How can we explain the fact that the hot deserts of Southern Arizona are filled with a great variety of plant and animal life?

In what way do the mineral productions of Colorado and Arizona differ?

How can we account for the much greater prosperity and comfort on the Arizona and New Mexican side of the boundary than on the Mexican side?

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

The Grand Canyon of the Colorado.

The story of Great Salt Lake.

How the Mormons turned a desert into a blooming garden.

Mining camps on the summit of the Rocky Mountains.

The Cliff Dwellers.

The Pueblo Indians and their country.

The old Spanish city of Tucson.

Santa Fe:—The second oldest settlement in the United States.

The Santa Fe Trail to California.

The Garden of the Gods—Colorado.

Denver—the "Queen City of the Plains."

Cripple Creek—a great mining camp.

The Petrified Forest of Arizona.

A cactus garden in an Arizona desert.

Dangers of a journey through the Grand Canyon of the Colorado.

THE NORTH PACIFIC STATES (WASHINGTON AND OREGON)

A LAND OF MOUNTAINS, DRY PLATEAUS AND MOIST COASTAL VALLEYS:—A LAND RENOWNED FOR THE GRANDEUR OF ITS EXTINCT VOLCANOES—ITS VAST FORESTS OF GIANT CONIFERS, ITS WHEAT FIELDS AND ORCHARDS.

MAP STUDIES

What is the position of Oregon and Washington:—The states we are now to study?

Across what natural regions do these states extend?

What mountain range crosses the centre of these states from north to south?

How does this range differ from others we have studied?

What mountains known by different local names extend along the coast?

What is the extent of the drainage basin of the Columbia?

How is it that this river has not yet been used to irrigate the dry plateau through which it flows?

What is the reason for the absence of a delta at the mouth of the Columbia?

Which state has the more favorable coast line for ocean trade, Washington or Oregon?

What advantages as well as disadvantages has Portland for foreign trade as compared with Tacoma and Seattle?

What is the nature of the surface of Eastern Oregon and Washington?

Compare the Willamette-Puget Sound Valley with the Great Valley of California.

SPECIAL PROBLEMS

By what name was the whole of this region once known?

What first brought people into the Oregon Territory?

How is it that the part lying north of the lower Columbia came near becoming British territory?

How is it that although eastern farmers began to settle in Oregon territory before the discovery of gold in California the region developed very much more slowly?

How did the difficulties of the Oregon Trail compare with those of the Carson Trail to California?

If the route to Oregon was easier why is it so few people went that way to California?

How is it that the early farmers settled in two widely separated localities:—One in the region of Walla Walla, the other in the Willamette Valley?

How can we explain the fact that Portland grew to a city long before there were any settlements on Puget Sound?

What are the difficulties connected with farming in much of the region lying west of the Cascade Range?

What are the difficulties of farming in much of the region east of the Cascade Range?

How is it that travel through the Olympic Mountains and portions of the Cascades is so difficult?

How can we account for the fact that many rivers of the Cascade Range issue from the lava rocks in great springs?

How can we account for the many lakes on the dry plateau of southern Oregon?

What is the story of the great volcanoes of the Cascade Range?

How far is it now possible to use the Snake and Columbia Rivers for navigation?

By what means have the cities of Puget Sound been made more accessible from the interior?

REVIEW

How can we explain the fact that the climate of the coastal region is so much milder than that of the Atlantic Coast in the same latitude?

What effect has been produced on the climate of the eastern part of these states by mountain ranges lying across the path of the westerly winds?

What causes have determined the nature and distribution of the forests?

What is the reason for these states being less noted for their minerals than any of the other western states?

What is the effect on the industries of the great difference in temperature and rainfall on the opposite sides of the Cascade Range?

Give the different influences which have determined the location of the cities?

What advantages for foreign trade have Seattle and Tacoma compared with San Francisco?

How is it that Portland, Oregon's chief commercial city, did not grow up at the mouth of the Columbia?

How is it that Eastern Washington is especially noted for wheat while Eastern Oregon is chiefly devoted to cattle and horses?

What are the conditions in the drier valleys which make apple growing so successful?

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

How Marcus Whitman aided the settlement of Oregon.

The canyon of the Columbia River.

Crater Lake National Park.

Mount Ranier National Park.

Methods of lumbering compared with those of the eastern states.

The expedition of Lewis and Clark.

The Olympic Mountains.

The story of one of the great volcanoes.

Portland—the metropolis of Oregon.

Why Seattle has the largest foreign trade of any Pacific coast city.

CALIFORNIA AND NEVADA

A REGION WHERE THE HIGHEST MOUNTAINS OUTSIDE OF ALASKA LOOK DOWN UPON THE LOWEST VALLEYS—WHERE DENSE FORESTS OF GIANT TREES CONTRAST WITH BURNING DESERTS:—A REGION ONCE KNOWN AS "THE LAND OF GOLD" BUT NOW RENOWNED FOR ITS SCENERY, AGREEABLE CLIMATE AND VAST ORCHARDS OF ALMOST EVERY KIND OF FRUIT THAT COULD BE DESIRED.

MAP STUDIES

What is the position and size of these states?

What natural regions are included within them?

Which of these natural regions covers almost all of Nevada?

What great contrasts in elevation do we find in California?

In what direction do most of the mountain ranges extend?

Compare the coast of California with New England as regards harbors?

What advantages has San Francisco Bay for commerce?

What islands do we find off the southern coast?

What two great peaks of the Cascade Range are found in California?

Find the largest areas of valley land.

What is the largest desert?

SPECIAL PROBLEMS

What name was first given to both these States?

What first attracted the attention of the world to California?

What discovery made Nevada famous?

For what is California now most noted?

What has been the effect of the Sierra Nevada Mountains upon the development of Nevada?

1. The Sierras have made access from the coast more difficult.

2. The Sierras cut off the cool moist ocean winds.

3. The Sierras furnish a considerable water supply for irrigation.

What reason have we for believing that the climate of Nevada was once more moist?

How is it that none of the rivers of Nevada except the Colorado reach the ocean?

In how far do the mineral resources of Nevada differ from those of California?

Why is it that most of the agricultural productions of Nevada are so different from those of California?

For what other mineral products besides gold is California noted?

1. There are important deposits of copper, lead and zinc.

2. More quicksilver is mined in California than in all the other states of the Union.

3. The deserts contain salt, soda, borax and potash.

4. There are vast stores of petroleum.

What finally made California more noted for its farms and orchards than for its minerals?

1. The employment of irrigation.

2. The diversified climate of the innumerable fertile valleys.

3. The building of the transcontinental railroads.

What two delta regions differing widely from each other in climate and productions does California possess?

1. The moist Sacramento-San Joaquin delta.

2. The dry and hot delta of the Colorado.

How is it that California produces such an extraordinary variety of fruits?

To what is due the wonderful scenery of California?

1. Earthquakes.
2. Volcanic action.
3. Ancient glaciers.
4. Stream erosion.

The story of the Salton Sea.

REVIEW

How is it that the early Spaniards made no settlements far away from the Coast?

Why did the Spaniards devote themselves chiefly to stock raising and cultivate the land so little?

What brought the first Americans to California?

How can we account for the remarkable variety of climates?

Although the mountains formed a serious barrier to emigration in what ways have they proved to be absolutely necessary?

Mention four things which have been influential in determining the position of the cities.

Explain the richness of the delta regions.

How was the great development of the Colorado Delta made possible?

To what cause must we attribute the bays along the California Coast?

How would the shore line have appeared if the land had sunken 1000 feet?

How can we explain the deposits of different salts in the desert valleys?

What has determined the routes of the railroads entering California?

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

Life in California under Mexican Rule.
The discovery of gold.
Why San Francisco has become so great a city.
What has made Los Angeles a great city.
The story of Salton Sea.
The plants and animals of the desert.
In the great forests.
The Yosemite Valley.
The islands off the California Coast.
California earthquakes.
How gold is obtained.
The Great Comstock Mines of Nevada.
The volcanoes of California.
Life in the desert.
The difficulties of travel to California in the early days.
The importance of the mountains to the people of California.
The attractions of California as a tourist resort.

THE TERRITORY OF ALASKA

A LAND OF WONDERFUL FIORDS AND OF THE HIGHEST MOUNTAINS AND LARGEST GLACIERS IN NORTH AMERICA:—A FAR NORTHERN REGION ONCE THOUGHT TO HAVE LITTLE VALUE BESIDES ITS FURS BUT NOW KNOWN TO POSSESS UNRIVALED FISHERIES AND VAST DEPOSITS OF MINERALS OF MANY KINDS.

MAP STUDIES

What position on the continent does the territory of Alaska occupy?

At what point does Alaska come the nearest to Asia?

What island bridge appears to be in process of being built to connect Southern Alaska with Asia?

What is the nature of the coast line? What coast of Europe does it resemble?

Is there any resemblance between the mouth of the Yukon and the mouth of the Mississippi?

In going from Skaguay to the lower Yukon Valley what province of Canada would you go through?

What is the nature of the surface of Southeastern Alaska?

Where are the highest mountains?

What is the character of the Arctic Coast?

What kind of a country does the lower Yukon traverse?

Where are the Pribylof Islands and for what are they noted?

SPECIAL PROBLEMS

Judging from the latitude what would we expect the climate to be?

How can we account for the extreme mildness of the southern coast climate and the great cold of the interior?

How can we account for the heavy precipitation on the southern slope of the Alaskan Mountains and the extreme dryness of the interior?

What four divisions can we make of Alaska?

1. The lofty Alaskan and Coast Ranges on the south.
2. The Alaskan Peninsula and Aleutian Islands.
3. The Interior or the Alaskan Highlands traversed by the Yukon River.
4. The Tundras along the Arctic Ocean.

Which of these divisions possesses the greatest mineral value?

What do the volcanoes of the Aleutian Islands and the many earthquakes tell us about this region?

What two distinct groups of natives do we find in Alaska?

What was known of Alaska at the time of its purchase?

Why is it that we now consider Alaska so valuable?

1. It contains vast stores of minerals.
2. Its fisheries are not excelled by any.
3. The forests of the coastal region possess great value.
4. Because of the seal and other fur-bearing animals.

What are some of the chief difficulties of mining in Alaska?

1. The coastal region is covered with dense vegetation.
2. In the interior the surface of the ground is frozen to a great depth.

In how far can Alaska be self supporting as regards vegetable and meat products?

What can we say of the great Alaskan mountains?

What are the difficulties connected with climbing these mountains?

REVIEW

What part of Alaska was first settled and what led to the founding of these settlements?

To what is due the enormous glaciers of the coastal slopes of the mountains?

Compare the coast of Alaska with that of New England and give the cause for the many islands and bays. Compare with the coast of Norway.

What has been the effect of the broken coastline on the development of Alaska?

Give reasons for so many years having passed after Alaska was known before the discovery of gold at Dawson?

Give the various ways in which the interior of Alaska can be reached.

What will be the ultimate result if the Aleutian Islands keep on growing?

What animals imported into Northern Alaska will aid in transportation and in increasing the food supply?

Find out what you can about the wild life of Alaska.

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

The habits of the fur seal.

The fisheries of Alaska.

The formation of icebergs from glaciers that enter the ocean.

Life in the gold fields of the Yukon.

Climbing a great Alaskan mountain.

The Esquimaux.

A scene in a village of the coast Indians.

The dangers of whaling in the Arctic Ocean.

A journey to the gold fields of the Yukon.

Summer in the Yukon Valley.

Winter traveling in the Yukon Valley.

The Aleutian Islands.

THE DOMINION OF CANADA AND NEWFOUNDLAND

A GREAT LAND RICH IN NATURAL RESOURCES WHICH ARE AS YET ONLY PARTLY DEVELOPED:—A LAND OF FORESTS, PRAIRIES AND ARCTIC TUNDRAS:—OF INNUMERABLE LAKES AND RUGGED MOUNTAINS:—A LAND FIRST SOUGHT FOR ITS WEALTH OF FURS, BUT NOW VALUED FOR ITS MINERALS, ITS UNUSED FORESTS AND ITS VAST WHEAT FIELDS.

MAP STUDIES

What part of North America does Canada occupy?
In how far does the surface resemble that of the United States?
In what direction does most of the land slope?
How well supplied is Canada with bays?
Which is the largest bay? Why is this bay of little use?
What is the largest river basin wholly within Canada?
What two large river basins lie partly within Canada?
How does the position of the McKenzie River make it of little value for navigation?
What part of Labrador is mountainous?
What coasts are rugged and mountainous?
What coasts are low and marshy?
What is the nature of the vast region about Hudson Bay?
How do we account for the many lakes?
What do the lakes tell us as to the nature of the climate and surface?
What two mountain systems in Western Canada?

SPECIAL PROBLEMS

Why do we speak of Canada as a great land?
Why has Canada in spite of its great natural resources developed so much more slowly than has the United States?

1. The larger part has a cold and inhospitable climate.
2. All the northern coast is ice-bound nine months in the year.
3. Much of the forest area is rocky and unsuited to farming.

4. The supply of coal and iron conveniently situated for manufacturing is not great.

How much have the great glaciers which once covered Canada had to do with its settlement?

1. The glacier swept away the soil leaving the rocks bare over much of central and northeastern Canada.

2. The innumerable glacial lakes facilitate travel.

3. Streams were turned into new channels whose rapids and waterfalls afford unlimited power.

Into what north and south belts generally similar to those of the United States can we divide Canada?

1. An eastern highland region.

2. An interior forested lowland sloping north instead of south.

3. A prairie belt.

4. A belt of plains.

5. A western highland region made up of two main ranges—Rocky Mountains and Cascade Range.

6. A forested Pacific belt with mild climate.

What great advantages does Canada possess in its coast line?

What was the most important influence leading to the exploration of the vast interior?

What led to the early exploration of the Arctic Coasts?

Into what three east and west belts each possessing a different value can we divide Canada?

1. The southern or farming belt.

2. The middle or forest belt.

3. The northern Tundras or Barren Lands.

What reasons have we for believing that Canada will become of great importance commercially?

What are the natural reasons for a close industrial and commercial union between Canada and the United States?

1. The climate of Canada is too cold for it to produce many food products which flourish in the United States.

2. Canada has vast reserves in timber which is becoming scarce in much of the United States.

3. Canada can supply the United States with furs, fish and some rare minerals.

4. The people of the two countries are closely related and speak the same language.

REVIEW

What great advantage does Canada possess in its coast line?

How is it that Canada possesses such important fisheries?

How does the climate make of little value the outlets on the North?

In what way is Canada's eastern outlet better than any on eastern coast of the United States?

What disadvantages are possessed by the St. Lawrence as an outlet for the grain of Western Canada?

What influence did the St. Lawrence and Great Lakes have upon the discovery and settlement of Canada?

Of how much importance for the development of Canada are the two great river systems wholly within its boundaries?

How does the Yukon compare in importance with the St. Lawrence?

Give the reasons for the great difference in climate between the Labrador Coast and the Pacific Coast in the same latitude.

How can we account for the fact that the climate is

drier and milder along the base of the Rocky Mountains than farther east?

In what different ways are the Western Highlands of great value?

What are the life conditions in the Barren Lands in the summer?

What are the chief occupations in the Coniferous Forest and the Tundra region?

What different causes have determined the location of the chief cities?

Why is Quebec sometimes called the "Gibraltar of America?"

What conditions determine the four leading occupations and where are these carried on?

Give the reasons for the route of the early French explorer Marquette from Quebec to the Mississippi River.

NEWFOUNDLAND

A LARGE ISLAND LYING OFF THE GULF OF ST. LAWRENCE:—A BRITISH COLONY AND THE CENTER OF A VERY IMPORTANT FISHING INDUSTRY.

What lands are included in the Newfoundland colony?

What is the relation of Labrador to Newfoundland?

What can we say of life on the Labrador Coast?

Why is farming of little importance on Newfoundland?

How can we account for the disagreeable climate?

What do we mean by the "Banks of Newfoundland?"

THE CANADIAN PROVINCES

NOVA SCOTIA, NEW BRUNSWICK AND PRINCE EDWARDS ISLAND:—THE MARITIME

PROVINCES OR LAND OF ACADIA:—A SEA-GIRT REGION OF ROCKY RIDGES AND FERTILE LOWLANDS KNOWN FOR ITS COAL, IRON AND IMPORTANT FISHING INDUSTRY.

In how far does this region resemble the New England States?

What four things determine the leading occupations?

Why is the iron industry more important here than in other parts of Canada?

What is there about the situation of Halifax which has made it an important city?

QUEBEC AND ONTARIO—THE GARDEN OF CANADA:—A LAND REACHING FROM THE FERTILE ST. LAWRENCE VALLEY FAR NORTH THROUGH THE FORESTS AND BARREN LANDS TO HUDSON BAY AND THE ARCTIC OCEAN.

How is it that these provinces present such a variation in climate and fertility?

To what part do we apply the term "Garden?"

What has led to the St. Lawrence Plain becoming the most thickly settled and most highly cultivated of any portion of Canada?

1. The climate is as mild as that of the northern United States.
2. The soil is fertile.
3. The commercial advantages are good.

How is it that the interior of Northern Quebec still remains a wilderness?

What can we say of the forest wealth of these provinces?

To what extent is mining carried on?
What influences have determined the position of the cities?
What has made Montreal the metropolis?
What has made the banks of the St. Lawrence a great summer camp ground?

MANITOBA, SASKATCHEWAN AND ALBERTA:—A LAND OF LAKES, FORESTS AND PLAINS WHERE WHEAT AND CATTLE FORM THE CHIEF PRODUCTS.

How are the prairies and plains related to those of the United States?
What is the reason for the extreme fertility of the prairies of Manitoba?
In what way do the plains of Saskatchewan and Manitoba differ from the prairies?
How does the climate and productions of the plains compare with those of the plains of the United States?
Why has this region been so slow in settling up?
What has determined the importance of Winnipeg?

BRITISH COLUMBIA—THE WESTERN CANADIAN HIGHLANDS:—A REGION OF MAGNIFICENT ALPINE SCENERY, INNUMERABLE GLACIERS, FORESTS AND MINERALS.

How do the Canadian Highlands compare with those to the south in the United States?

1. The Rocky Mountains lie near the eastern border.
2. The Coast Ranges border the Pacific Ocean.
3. The central portion is a mountainous plateau.
4. The climate is colder and more moist.

How does the coast differ from that farther south?
In what lies the wealth of British Columbia?

1. Forests cover a large part of the region.
2. The coast waters form a vast undeveloped fishing ground.
3. Minerals abound especially in the Coast Ranges.
4. The Mountains exhibit magnificent scenery.

Why is agriculture of comparatively little importance?
What has determined the position of the chief mainland ports?
What are the advantages possessed by Victoria?

THE NORTHWEST TERRITORIES:—ONCE BELIEVED TO POSSESS LITTLE VALUE:—NOW KNOWN TO BE RICH IN GOLD AND OTHER MINERALS.

What position does the Yukon Territory occupy?
By what routes is this region usually reached?
How does the Northwest Territory contrast with the Yukon Territory?
Why do we often call the Northwest Territory the "Barren Lands?"

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

The life of the fur hunter.
The Hudson Bay Fur Co.
The dangers of the Labrador Coast
Attempts to discover a northwest passage.
Life in the woods of Central Canada.
The Barren Lands in summer.
Travel in winter contrasted with travel in summer in Northern Canada.
Among the Fiords of British Columbia.

The attractions of the valley and river of the St. Lawrence.

The life of the Newfoundland fisherman.

Placer mining at Dawson.

Scenery along the Canadian Pacific Railway.

MEXICO

THE HOME OF THE AZTECS:—A LAND OF TROPICAL COASTS, COOL TABLELANDS AND LOFTY VOLCANOES:—A LAND OF VAST AGRICULTURAL AND MINERAL WEALTH AS YET BUT POORLY DEVELOPED.

MAP STUDIES

What position does Mexico occupy?

What natural regions differing greatly from each other compose Mexico?

What does the map tell us is the most important and striking feature of Mexico?

What led the early Spanish Explorers to think lower California was an Island?

In how far do the coastal regions resemble those of the Southern United States?

What does the map tell us as to the harbors of Mexico?

In how far do the highlands of Mexico resemble those of the United States to the north?

What is the chief mountain range?

What is the nature of the lofty peaks?

What can we say as to the rivers of Mexico?

How does the surface of Yucatan differ from that of the most of Mexico?

How does the Isthmus of Tehuantepec compare with the Isthmus of Panama?

Where do we find most of the cities? Explain the reason.

Compare traveling from east to west with traveling from north to south across Mexico?

SPECIAL PROBLEMS

What is the present extent of Mexico compared with what it was once?

How do the east and west coasts compare as regards:—

1. Rainfall.
2. Healthfulness.
3. Products.
4. Harbors.

How is it that in traveling from coast to coast across Mexico we pass through so many different climates?

How is it that in going from north to south we find little difference in climate?

Into what three climatic belts can we divide Mexico?

1. Tierra Caliente or "hot land" rising from the sea level to 3000 feet.

2. Temperate lands with sub-tropic climate 3000 to 6000 feet.

3. The "Tierra Fria" or cold belt from 6000 feet upwards.

What are the conditions of life in the different belts?

1. The coastal regions have a hot sickly climate with dense vegetation.

2. The middle belt has a healthful climate with less heat and rain.

3. The upper belt forming the interior is a cool dry tableland.

Why is life more difficult on the northern end of the tableland than about the city of Mexico upon the southern end?

What are the chief productions of the different belts?

1. The coastal lands produce a great variety of tropical fruits and woods.

2. The intermediate belt grows sub-tropical products such as are found in hot valleys of California.

3. The upper belt produces crops of the temperate belt.

Why is agriculture the chief occupation of the two lower belts, mining of the upper belt?

In what part is cattle raising important and why?

What is the reason for the sparse settlement of Lower California?

In what way does the Peninsula of Yucatan interest us?

In how far does the culture of Mexico resemble that of Spain?

Why are the buildings of most of Mexico so much like those of Spain?

How is it that we find so great a difference in the degree of comfort and culture between the people of Mexico and those of the United States?

1. The population of Mexico is in large part of Indian origin.

2. Frequent revolutions have helped to keep the people ignorant and poor.

3. Much of the land is held in large ranches the laborers upon which are almost slaves.

4. Owing to scarcity of water much of the interior is given over to stock raising, an occupation affording few comforts.

5. The lack of railroads and navigable rivers have retarded development.

REVIEW

What is the result on the productions of Mexico of the many different climates?

How is it possible to raise temperate fruits in the tropics?

What has been the effect of heat and moisture on the coastal lowlands?

Would it have been better or worse for the development of Mexico if it had possessed great coal beds instead of silver deposits?

Why is the Pacific slope much drier than that bordering the Gulf of Mexico?

What effect has the inaccessibility of the tableland upon the development of Mexico?

Describe the conditions of life in each of the three belts.

Mention some of the products exported from Mexico.

Why is it the people of Mexico import so few goods from other countries?

Why was there so little travel by land between Mexico and California in the early days?

What effect has the absence of navigable rivers had on Mexico?

What can we say of the food and homes of the Peons?

What has been the most important mineral product of Mexico?

What can you find out about the great volcanoes of Mexico?

By what two routes is the city of Mexico reached?

What are the main natural resources which should make of Mexico a great and rich country?

What resources does Mexico lack that are possessed by the United States?

Explain the distribution of the rainfall?

Where is the driest part of Mexico?

Why is it that the Gulf of California is of little use commercially?

Mention a number of the products of each climatic belt.

What advantage is it that the enormous deposits of petroleum are near the Gulf Coast?

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

The conquest of Mexico by the Spaniards.
The city of Mexico and its surroundings.
The great volcanic peaks.
Life in the coastal lowland.
The wonderful plants of the Sonora desert.
The home and life of a Mexican family.
The strange ruins of Yucatan.
The different climatic belts passed through between Vera Cruz and the City of Mexico.
The different races of people living in Mexico.
The plants of Mexico useful for making fibre.
The building of a Mexican home.

THE COUNTRIES OF CENTRAL AMERICA

A LAND OF SIX SMALL REPUBLICS, ONE PARTLY IN SOUTH AMERICA, AND A BRITISH COLONY:—A TROPICAL REGION OF DENSE LOWLAND FORESTS AND AN ELEVATED INTERIOR WHICH, THOUGH POSSESSING GREAT NATURAL WEALTH STILL REMAINS POORLY DEVELOPED NOTWITHSTANDING THE FACT THAT THIS WAS THE PART OF THE MAINLAND FIRST DISCOVERED.

MAP STUDIES

What position does Central America occupy?
How is its surface related to that of Mexico?
What advantages in the way of coast lines do these countries possess?
What can we say of the height of the mountains?

From its position what would you judge the climate to be?

What possible route for a canal does the map show besides that of Panama?

What determined the position of the Panama Canal?

What can we say of the harbors as compared with those of Mexico?

What exceptional commercial advantages do these countries possess?

REVIEW

Mention the countries of Central America.

In how far does Central America resemble Mexico?

1. It has hot moist coastal lowlands.
2. It has a healthful elevated interior.
3. The heaviest rainfall occurs upon the eastern side.
4. The best harbors are upon the Pacific side.

In how far does the civilization of these countries resemble that of Mexico?

Compare the climate of the coast region with that of the interior and tell why the most of the people live in the latter region.

Compare the coast products with those of the highlands of the interior.

What earth disturbances often cause great loss of life?

What do the earthquakes tell us about the stability of this region?

How does the interior differ from the interior of Mexico?

What products are shipped to the United States in considerable quantity?

What is needed to bring about a higher civilization in these countries?

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

The early Spanish discoveries.

How the Isthmus was crossed before the building of the Canal.

The Panama Canal.

The possibility of a canal through Lake Nicaraugua.

Why the climate of the interior is agreeable though under a tropical sun.

A plantation in Costa Rica.

The value of the forests of the coast lowlands.

THE WEST INDIA ISLANDS

A GROUP OF MANY ISLANDS LYING IN THE TROPICS BETWEEN NORTH AND SOUTH AMERICA.

MAP STUDIES

What are the waters surrounding the West India Islands?

By what general name are the four larger islands known?

What name do we give to the smaller islands lying between Costa Rica and South America?

What can we say generally as to the nature of the surface?

How does the surface of the Bahamas differ from that of the other islands and resemble Florida?

What islands far to the northeast belong to England?

REVIEW

To what country did these islands originally belong?

Which ones are now independent republics?

Which ones belong to England? Which belong to the United States?

Which island belonging to France has suffered from volcanic eruptions?

How can we account for the backward condition of most of these islands?

Why do the northeast sides receive the greatest rainfall? (Compare with Mexico and Central America.)

How do the productions compare with those of the lowlands of Central America and Mexico?

How is it that the most of the islands have a healthy climate although lying in the tropics?

For what productions is Cuba most noted?

With what countries do these Islands carry on the most of their trade?

What has the United States done to make not only Cuba but Panama healthful?

Why is Hayti the most backward of all the islands?

What can we say of the condition of the islands belonging to the United States?

TOPICS FOR ORAL DISCUSSION OR WRITTEN REPORTS

The discovery of the islands by Columbus.

The times of the early Buccaneers.

The eruption of Mt. Pelee on the island of Martinique.

A tropic hurricane.

How the tropics are made healthful for white people.

Why the West India Islands form such an attractive winter resort.

The Bahama Islands.

Life in Porto Rico.

The Spanish Main.

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